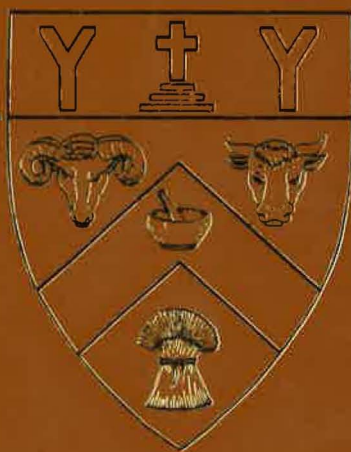


Financial Budget Manual

1987

LINCOLN COLLEGE



FINANCIAL BUDGET MANUAL 1987

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ISBN 0-86476-009-4

ISSN 0113-1397

PREFACE

The "Financial Budget Manual 1987" continues the series of Budget Manuals published by Lincoln College. The aim of the Budget Manual is to provide assistance to those who prepare budgets for primary producers, as well as students of farm or horticultural management, with information regarding revenues and expenditures likely to be received/paid by primary producers, including information regarding enterprise selection, income taxation, and estate and gift duties.

The information contained in the manual is that ruling on or about 1 January 1987. Prices do not remain stationary so the Manual should be used as a guide only. Information quoted has been provided by a few traders in a few centres throughout New Zealand, and some variation may occur between alternative supplies and other areas. Trade names have been used for clarity and convenience: no preferential endorsement by the College is intended, nor is any criticism implied of any product which does not appear in the Manual. It should also be noted that prices are quoted exclusive of GST unless stated otherwise.

We would like to thank all individuals, organisations and commercial firms who have provided information for our use. Without their co-operation, the production of the Financial Manual is not feasible. We wish to express our appreciation to Kaye Fitzpatrick for her secretarial input, and our special thanks to Fiona Black for her efforts in gathering and collating information, and her considerable input in preparing the manuscript.

M.B. Clark
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EDITORS

January 1987

CONTENTS

Page

SECTION 1 - FARM REVENUE

1.1	Sheep	1- 3
1.1.1	Export Meat Schedule	1- 3
1.1.2	Local Meat Prices	1- 5
1.1.3	Store and Breeding Stock Prices	1- 6
1.2	Wool Prices	1- 8
1.2.1	Wool Income Stabilisation Arrangements	1- 8
1.2.2	Wool Prices in late 1986	1- 10
1.3	Skins	1- 12
1.4	Cattle	1- 13
1.4.1	Export Meat Schedule	1- 13
1.4.2	Local Cattle Prices	1- 15
1.4.3	Store and Breeding Stock Prices	1- 15
1.5	Dairy Produce	1- 18
1.5.1	Whole Milk for Manufacture	1- 18
1.5.2	Whole Milk for Town Supply	1- 19
1.5.3	Dairy Cattle Prices	1- 20
1.6	Pig Production	1- 22
1.6.1	Pork Prices	1- 22
1.6.2	Live Pig Sales	1- 23
1.7	Goat Production	1- 25
1.7.1	Introduction	1- 25
1.7.2	Chevon Production	1- 25
1.7.3	Goats Milk Production	1- 25
1.7.4	Mohair	1- 26
1.7.5	Stock	1- 26
1.7.6	Cashmere	1- 27
1.8	Deer Production	1- 28
1.8.1	Introduction	1- 28
1.8.2	Velvet	1- 28
1.8.3	Venison	1- 28
1.8.4	Livestock	1- 29
1.9	Crops	1- 32
1.9.1	Wheat	1- 32
1.9.2	Barley	1- 32

1.9.3	Oats	1- 32
1.9.4	Peas	1- 33
1.9.5	Beans.....	1- 33
1.9.6	Cauliflower	1- 34
1.9.7	Broccoli.....	1- 34
1.9.8	Potatoes	1- 34
1.9.9	Lupins	1- 34
1.10	Small Seeds	1- 35
1.11	Fruit Production	1- 37
1.12	Vegetable Production	1- 41
1.13	Sundry Income	1- 46
1.13.1	National Water and Soil Conservation Authority Grants	1- 46
1.13.2	Refunds of Taxes on Fuels	1- 47

SECTION 2 - FARM EXPENDITURE DATA

2.1	Animal Health	2- 3
2.1.1	Dips, Sprays and Dressings	2- 3
2.1.2	Sheep Drenching Guide	2- 4
2.1.3	Cattle Drenching Guide	2- 4
2.1.4	Anthelmintics Cost	2- 4
2.1.5	Vaccines	2- 6
2.1.6	Antibiotics	2- 7
2.1.7	Disinfectants	2- 7
2.1.8	Bloat Control.....	2- 8
2.1.9	Dairy Ointments, Soaps and Teat Sprays	2- 8
2.1.10	Dairy Shed Hygiene - Detergents and Sanatisers	2- 9
2.1.11	Metabolics.....	2- 11
2.1.12	Animal Health Equipment	2- 11
2.1.13	Veterinary Club Membership	2- 12
2.2	Feed and Nutrition Costs	2- 13
2.2.1	Cattle	2- 13
2.2.2	Sheep	2- 13
2.2.3	Pigs	2- 14
2.2.4	Deer	2- 15
2.2.5	Goats	2- 15
2.2.6	Horses	2- 15
2.2.7	Rabbits	2- 15
2.2.8	Dogs	2- 15

2.2.9	Poultry	2- 16
2.2.10	Nutritional Supplements	2- 17
2.2.11	Mineral and Vitamin Supplements	2- 17
2.2.12	Grazing Fees	2- 19
2.3	Stock Management	2- 20
2.3.1	Mating Management Aids	2- 20
2.3.2	Productivity Improvers	2- 20
2.3.3	Lambing, Calving and Kidding Requisites	2- 20
2.3.4	Tailing and Marking Requisites	2- 21
2.3.5	Raddles and Markers	2- 22
2.3.6	Stock Identification	2- 22
2.3.7	De-horning	2- 24
2.3.8	Scales	2- 24
2.3.9	Animal Crushes	2- 25
2.3.10	Dog Registration and Hydatid Control Fees	2- 25
2.3.11	Kennels, Shelters, Motels	2- 25
2.3.12	Chains, Collars, Rings, Leads	2- 25
2.3.13	Whistles, knives, Steels	2- 26
2.4	Breeding Expenses	2- 27
2.4.1	Artificial Breeding Fees (Canterbury)	2- 27
2.4.2	Herd Testing Charges	2- 27
2.4.3	Beefplan (National Beef Recording Service)	2- 28
2.4.4	Sheep Plan	2- 28
2.4.5	Sire Replacement Costs	2- 28
2.5	Dairy Shed Equipment	2- 29
2.6	Shearing Shed Expenses	2- 32
2.6.1	Plant	2- 32
2.6.2	Gear and Accesories	2- 32
2.6.3	Woolpresses	2- 33
2.6.4	Wool Tables	2- 33
2.6.5	Wool Pack Holders	2- 33
2.6.6	Fleece Weighers	2- 34
2.6.7	Wool Bale Trolleys	2- 34
2.6.8	Woolroom Expenses	2- 34
2.7	Freight and Cartage	2- 36
2.7.1	Railway Transport	2- 36
2.7.2	Country Services Railfreight Prices	2- 37
2.7.3	Road Transport Rates	2- 38
2.7.4	Air Rates	2- 40
2.7.5	Cartage Rates	2- 41

2.8	Seeds	2- 43
2.8.1	Wheat	2- 43
2.8.2	Barley	2- 43
2.8.3	Oats	2- 43
2.8.4	Lupins	2- 43
2.8.5	Ryecorn	2- 43
2.8.6	Maize	2- 44
2.8.7	Peas	2- 44
2.8.8	Small Seeds	2- 44
2.8.9	Seed Coatings	2- 45
2.8.10	Vegetable Seeds	2- 45
2.8.11	Flower Seeds	2- 47
2.8.12	Bulbs	2- 47
2.9	Cash Cropping Expenses	2- 48
2.9.1	Sacks	2- 48
2.9.2	Box Hire	2- 48
2.9.3	Seed Testing Certification Fees	2- 48
2.9.4	Seed Testing Fees	2- 48
2.9.5	Herbage Seed Levy	2- 48
2.9.6	Wheat Growers Levies	2- 49
2.9.7	Potato Levy	2- 50
2.9.8	Consolidated Dressing and Store Handling Charges	2- 50
2.9.9	Grain and Seed Drying Charges	2- 51
2.9.10	Weighing Charges	2- 51
2.10	Bees	2- 52
2.11	Horticulture	2- 57
2.11.1	Fruit and Nut Trees	2- 57
2.11.2	Fruit Plants	2- 57
2.11.3	Green Houses and Growing Tunnels	2- 58
2.11.7	Shelter and Windbreak Cloth	2- 58
2.11.5	Fertiliser	2- 59
2.11.4	Soil Fumigants	2- 60
2.11.5	Growth Regulants	2- 61
2.11.6	Herbicides	2- 61
2.11.7	Fungicides	2- 63
2.11.8	Insecticides	2- 65
2.11.11	Miticides	2- 67
2.11.12	Spray Equipment	2- 67
2.11.13	Tractors	2- 68
2.11.14	Orchard Mowers	2- 69
2.11.15	Planting/Propagating Material	2- 69
2.11.16	Tree Planter Auger	2- 69
2.11.17	Pruning Equipment	2- 70

2.11.18	Mechanical Protection	2- 71
2.11.19	Picking Equipment	2- 71
2.11.20	Packaging Equipment	2- 72
2.11.21	Cool Storage	2- 74
2.11.22	Horticultural Levies	2- 74
2.12	Weed and Pest Control	2- 76
2.12.1	Herbicides	2- 76
2.12.2	Insecticides	2- 81
2.12.3	Fungicides	2- 83
2.12.4	Wetting, Spreading and Marking Agents	2- 84
2.12.5	Rodent Prevention	2- 85
2.13	Clothing and Safety Equipment	2- 86
2.14	Fertiliser and Lime	2- 89
2.14.1	Fertiliser	2- 89
2.14.2	Lime.....	2- 91
2.15	Drainage, Irrigation and Water Supply	2- 92
2.15.1	Drainage Materials	2- 92
2.15.2	Specfic Tanks	2- 92
2.15.3	Border Dyke Irrigation	2- 93
2.15.4	Spray Irrigation System Costing.....	2- 93
2.15.5	Irrigator Models and Equipment	2- 95
2.15.6	Remote Control Systems	2- 97
2.15.7	Irrigation Charges	2- 97
2.15.8	Stock Water Supply Charges	2-100
2.15.9	Well Drilling	2-100
2.15.10	Pumps	2-101
2.15.11	Water Supply Costs	2-102
2.15.12	Well Liners	2-103
2.15.13	Concrete Water Troughs	2-103
2.15.14	Tanks	2-104
2.15.15	Valves and Floats	2-104
2.16	Shelter and Farm Forestry Labour Costs	2-105
2.16.1	Shelter Plants	2-105
2.16.2	Farm Forestry Labour Costs	2-105
2.17	Fencing Equipment and Materials	2-110
2.17.1	Wire	2-110
2.17.2	Posts	2-110
2.17.3	Battens (Tanalised)	2-113
2.17.4	Staples	2-113
2.17.5	Wire Netting	2-114
2.17.6	Chain Link Fence	2-116

2.17.7	Straining Equipment	2-116
2.17.8	Post and Standard Drivers	2-117
2.17.9	Post and Standard Removers	2-118
2.17.10	Wire Reels	2-118
2.17.11	Post Hole Diggers	2-118
2.17.12	Tools	2-119
2.17.13	Gates	2-119
2.17.14	Gate Fittings	2-120
2.17.15	Cattle Stops	2-121
2.17.16	Electric Fence Energisers	2-121
2.17.17	Earth Stakes	2-122
2.17.18	Insulators	2-122
2.17.19	Electric Fence Wire, Cable and Netting	2-123
2.17.20	Electric Fence Standards	2-124
2.17.21	Electric Fence Reels	2-125
2.17.22	Electric Fence Accessories	2-126
2.17.23	Guide to Fencing Costs (1986/87)	2-127
2.18	Farm Machinery and Equipment Costs	2-130
2.18.1	Tractors	2-130
2.18.2	Crawlers	2-133
2.18.3	Combine Harvesters	2-133
2.18.4	Forage Harvesters	2-134
2.18.5	Trucks	2-136
2.18.6	Farm Bikes	2-137
2.18.7	Ploughs	2-139
2.18.8	Mole Drain Ploughs	2-139
2.18.9	Chisel Ploughs and Subsoilers	2-140
2.18.10	Discs	2-141
2.18.11	Power Discs	2-141
2.18.12	Cultivators	2-142
2.18.13	Rotary Cultivators	2-144
2.18.14	Power Harrows	2-145
2.18.15	Harrows (conventional).....	2-146
2.18.16	Rollers	2-146
2.18.17	Drills and Seed Boxes	2-147
2.18.18	Precision Drills	2-148
2.18.19	Transplanters.....	2-148
2.18.20	Fertiliser Spreaders and Topdressers and Manure Spreaders	2-148
2.18.21	Windrowers	2-149
2.18.22	Choppers and Shreaders	2-149
2.18.23	Mowers	2-149
2.18.24	Mower Conditioners	2-150
2.18.25	Mower Toppers, Slashers	2-150
2.18.26	Hay Conditioners	2-152
2.18.27	Conventional Balers	2-153

2.18.28	Big Balers	2-153
2.18.29	Hay Handling Equipment	2-154
2.18.30	Silage Handling Equipment	2-155
2.18.31	Grain Handling Equipment	2-156
2.18.32	Feed Mixers	2-156
2.18.33	Chainsaws, Bushcutters, Hedge Trimmers	2-157
2.18.34	Portable Generators and Welders	2-158
2.18.35	Spray Equipment	2-159
2.18.36	Windmills	2-162
2.18.37	Farm Machinery Accessories	2-162
2.18.38	Trailers	2-162
2.19	Micro-Computers	2-164
2.19.1	Farmers Requirements	2-164
2.19.2	Guides for Purchasing a Farm Micro-Computer	2-164
2.19.3	General Guidelines	2-165
2.19.4	Hardware Prices	2-166
2.19.5	Software Prices	2-166
2.19.6	The Kellogg Farm Management Unit	2-168
2.20	Buildings	2-169
2.20.1	Dwellings	2-169
2.20.2	Garages	2-169
2.20.3	Sleepouts	2-170
2.20.4	Woolshed/Covered Yards	2-170
2.20.5	Sheep Yards	2-170
2.20.6	Cattle Yards	2-171
2.20.7	Deer Complex Building Costs	2-171
2.20.8	Dairy Sheds	2-172
2.20.9	Haybarns/Implement Sheds	2-172
2.20.10	Packing Sheds	2-172
2.20.11	Killing Shed	2-172
2.20.12	Grain Silos	2-173
2.20.13	Silage Pits	2-173
2.20.14	Structural Aids	2-173
2.21	Repairs and Maintenance	2-175
2.22	Vehicle Expenses	2-176
2.22.1	Vehicle Registration	2-176
2.22.2	Licencing Fees	2-177
2.22.3	Road User Charges	2-177
2.22.4	Fuel, Oil and Grease	2-178
2.22.5	Repairs and Maintenance	2-179
2.22.6	Tractor Running Costs	2-179
2.22.7	Combine Harvesters Running Costs	2-182

2.23	Electricity	2-184
2.24	Administration Expenses	2-189
2.24.1	Telephone and Toll Charges	2-189
2.24.2	Postage and Stationery	2-190
2.24.3	Travelling	2-191
2.24.4	Bank and Stock Company Charges	2-191
2.25	Standing Charges	2-192
2.25.1	Insurances	2-192
2.25.2	Rates	2-194
2.25.3	Interest	2-194
2.25.4	Rent	2-199
2.26	Professional Fees	2-200
2.26.1	Accountancy Fees	2-200
2.26.2	Consultancy Charges	2-201
2.26.3	Legal Fees	2-202
2.26.4	Real Estate Charges	2-203
2.26.5	Valuation Charges	2-206
2.26.6	Land Transfer Charges	2-206
2.27	Wages	2-207
2.27.1	Farms and Stations (Dairy Farms)	2-207
2.27.2	Farms and Stations (Sheep Meat and Wool)	2-208
2.27.3	Farms and Stations (Meat (other than sheep meat) Grain, Seed and Herbage	2-210
2.27.4	Shearers and Shedhands Wages	2-211
2.27.5	Market Garden Workers	2-213
2.27.6	Orchard and Vineyard Workers	2-215
2.27.7	Nurserymen and Gardners	2-217
2.27.8	Bowling Clubs and Other Sports Bodies Greenkeepers	2-219
2.27.9	Wages of Management	2-219
2.28	Contracting	2-220
2.28.1	Contract Heading	2-220
2.28.2	Baling	2-220
2.28.3	Contract Windrowing	2-220
2.28.4	Silage	2-220
2.28.5	Hiring Rates for Farm Equipment	2-221
2.28.6	Contract Dipping	2-222
2.28.7	Shearing Rates	2-222
2.28.8	Ground Spreading of Fertiliser	2-222
2.28.9	Aerial	2-223
2.28.10	Miscellaneous	2-224

2.29	Selling Charges	2-225
2.29.1	Yard Fees	2-225
2.29.2	Commission on Stock sold through Stock Agents	2-226
2.29.3	Wool Charges	2-226

SECTION 3 - ENTERPRISE ANALYSIS

3.1	Introduction	3-3
3.2	Worked Examples of Crop and Horticulture Gross Margins	3-4
3.2.1	First Wheat Crop (Oroua ex pasture)	3-4
3.2.2	Glasshouse Tomatoes	3-5
3.3	Sheep Gross Margins	3-6
3.4	Dairy Cows (South Island Seasonal Supply)	3-13
3.5	Cash Flows for Long Term Crops	3-17

SECTION 4 - INCOME TAXATION

4.1	Introduction	4-3
4.2	Taxation in New Zealand	4-3
4.2.1	Overview	4-3
4.2.2	P.A.Y.E. Tax System	4-3
4.2.3	Provisional Tax System	4-5
4.2.4	Returns of Income	4-5
4.2.5	Assessment	4-7
4.3	Calculating Taxable Income	4-8
4.4	Taxation of Individuals	4-9
4.4.1	Overview	4-9
4.4.2	Exempt Income	4-9
4.4.3	Assessable Income	4-10
4.4.4	Deduction for Employment Related Expenses ...	4-12
4.4.5	Special Exemptions	4-12
4.4.6	Personal Tax Rebates	4-13
4.5	Taxation of Companies	4-19
4.6	Taxation of Partnerships	4-20
4.6.1	Overview	4-20
4.6.2	Family Partnerships	4-20

4.7	Taxation of Trusts	4-22
4.7.1	Classification of Trusts	4-22
4.7.2	Liability for Income Tax	4-22
4.7.3	Classification of Income	4-23
4.8	Farmers	4-24
4.8.1	Liability for Income Tax	4-24
4.8.2	Farm Income	4-24
4.8.3	Farm Expenses	4-25
4.8.4	Valuation of Trading Stock	4-29
4.8.5	Depreciation	4-36
4.8.6	Farming Investment Allowance.....	4-39
4.8.7	Expenditure on Land Improvements Development Expenditure	4-39
4.8.8	Recovery of Development Expenditure and Interest	4-41
4.8.9	Limitation of Tax Losses from Farming or Landowning.....	4-42
4.8.10	Timber Sales and Farm Forestry	4-42
4.8.11	Income Levelling Schemes	4-43
4.9	Horticulture	4-45
4.10	Fishing Industry	4-48
4.10.1	Spreading of Repair Costs on Fishing Boats	4-48
4.10.2	Depreciation	4-48
4.10.3	Fishing Investment Allowance.....	4-49
4.10.4	Development Expenditure - Fish Farming	4-49
4.10.5	Income Equalisation Scheme	4-50
4.11	Export Incentives	4-51
4.11.1	Export Performance Incentive for Qualifying Goods.....	4-51
4.11.2	Export Performance Incentive for Qualifying Services and/or Overseas Projects	4-53
4.11.3	Export Performance for Qualifying Tourist Services	4-53
4.11.7	Export Market Development and Tourist Promotion Incentives	4-54
4.11.5	Export Market Development Activities Incentives for Self-Employed Taxpayers	4-55
4.11.4	Export Programme Suspensory Loan Scheme	4-57

4.12	Dispositions of Matrimonial Property	4-58
4.13	Fringe Benefits Tax	4-60
4.13.1	General Provisions	4-60
4.13.2	Definition of Fringe Benefit	4-60
4.13.3	Calculation of Fringe Benefit Tax	4-62
4.13.4	Value of Fringe Benefit Tax	4-62
4.14	Goods and Services Tax	4-64
4.14.1	Overview	4-64
4.14.2	Returns and Payment of GST	4-65
4.14.3	Tax Invoices	4-66
4.15	Taxation Reform Bill (No. 2)	4-68
4.15.1	Clawback Provisions	4-68
4.15.2	Loss Offset Provisions	4-68
4.15.3	Farmers' Expenditure on Tree Planting	4-68
4.15.4	Expenditure on Land Improvement	4-68
4.15.5	Forestry	4-69
4.15.6	Valuation of Livestock	4-70
4.15.7	Taxation of Bloodstock	4-72
4.15.8	Miscellaneous Provisions	4-74
4.16	Appendices	4-75
4.16.1	Appendix I, Last Days for Payments by Provisional Taxpayers	4-75
4.16.2	Appendix II, Rates of Income Tax for Individuals 1986-87 Income Year 1987-88 Income Year	4-77
4.16.3	Appendix III, Expenditure on Land Improvement	4-78
4.16.4	Appendix IV, Average Market Values of Livestock for the 1986 Income Year	4-82

SECTION 5 - ESTATE AND GIFT DUTY

5.1	Introduction	5-3
5.2	Estate Duty	5-3
5.2.1	Introduction	5-3
5.2.2	Property Liable to Estate Duty	5-3
5.2.3	Exemptions	5-5
5.2.4	Allowable Debts	5-5
5.2.5	Matrimonial Home Allowance	5-6
5.2.6	Charitable Allowance	5-6
5.2.7	Valuation of Estate	5-6
5.2.8	Valuation of Successions	5-7

5.2.9	Calculations of Estate Duty	5-8
5.2.10	Reliefs.....	5-8
5.2.11	Assessment and Collection	5-9
5.2.12	Example of Estate Duty Assessment	5-10
5.3	Gift Duty	5-14
5.3.1	Definitions	5-14
5.3.2	Valuation of Gift	5-14
5.3.3	Exemptions from Gift Duty	5-15
5.3.4	Disposition of Matrimonial Property	5-15
5.3.5	Calculation of Gift Duty	5-17
5.3.6	Aggregation of Gifts	5-17
5.3.7	Assessment and Collection	5-18
5.3.8	Example of Gift Duty Assessment.....	5-18
5.4	Appendices	5-20

SECTION 1

FARM REVENUE

1.1 SHEEP

1.1.1 Export Meat Schedule

Meat which is destined for export is graded by the New Zealand Meat Producers' Board. The various grades are paid for according to a schedule which is set every week during the killing season. Three main factors influence the prices offered:

- Changes in meat prices due to supply and demand on overseas markets, especially Smithfield.
- Changes in prices for by-products, and
- Changes in killing charges.

The payout for ewes, lambs and wethers is based on a separate assessment for meat and another for pelt and wool payment (see Section 1.3). The basis for calculating future lamb schedules has been altered. Exporters derive the schedule price by deducting all known costs (on a per head basis initially) from the estimated selling price. The costs have to be converted from a per head basis to a per kilogram basis. Previously, the costs were divided by an average weight for all lambs, but a new formula uses the average weight for each particular grade. This method reflects the true processing costs of various grades and weight ranges, but does not reflect market differentials in the schedule.

Below is a copy of an export schedule as set by the N.Z. Meat Producers' Board.

MEAT EXPORTERS' SCHEDULE PRICES TO PRODUCERS

Sheep and Lamb

The following export schedule prices took effect from 8 December 1986.

<u>Grade</u>	<u>Weight range</u>	<u>Schedule Payment</u> <u>South Island</u>
	<u>kg</u>	
Lambs:		
PL	9.0 - 12.5	160.0
PM	13.0 - 16.0	160.0
PX	16.5 - 20.0	132.0
PH	20.5 and over	127.0

<u>Grade</u>	<u>Weight range</u> <u>kg</u>	<u>Schedule Payment</u> <u>South Island</u>
TL	9.0 - 12.5	105.0
TM	13.0 - 16.0	120.0
TH	16.5 - 25.5	118.0
YL	9.0 - 12.5	156.0
YM	13.0 - 16.0	160.0
YX	16.5 and over	157.0
A	under 9.0	180.0
FL	9.0 - 12.5	101.0
FM	13.0 - 16.0	115.0
FH	16.5 and over	113.0
CL	9.0 - 12.5	95.0
CM	13.0 - 16.0	112.0
CH	16.5 and over	110.0
M	ALL WEIGHTS	34.0
Hoggets:		
HL	ALL WEIGHTS	77.0
HX	ALL WEIGHTS	77.0
Mutton:		
ML	To - 22.0	76.0
ML	22.5 and over	80.0
MH	ALL WEIGHTS	61.0
MX	To - 22.0	82.0
MX	22.5 and over	86.0
MM	ALL WEIGHTS	70.0
MF	ALL WEIGHTS	49.0
MP	ALL WEIGHTS	45.0
RAM	ALL WEIGHTS	22.0

The following deductions will be made from the Killing Sheets:

Processing Charges: Lambs \$7.78 per head plus 18 cents per kg,
Sheep \$9.33 per head plus 16 cents per kg.

Drafting Fee: Lambs 33 cents per head, Sheep 25 cents per head.

Federated Farmers Levy: 1.75 cents per head.

Transport: Farm to Port Works.

NZMPB Levy: Lambs 20 cents per head, Sheep 29 cents per head.

A nil rate of levy will apply to any condemned stock following slaughter.
The above schedule is subject to alteration without notice.

1.1.2 Local Meat Prices

There is a large amount of meat sold on the hoof from farms to wholesale buyers, but the weekly sales at Addington and Burnside still set the market in the South Island, as do sales at Stortford Lodge and Papakura in the North Island. The current situation can be determined from the weekly stock reports in the newspapers.

Prices for livestock paid at the Addington Sales of 9 and 10 December 1986 are as follows:

Prime Lambs:	Average	\$18 to \$22
	Smaller	\$16 to \$18
	Better ram Lambs	up to \$24
Store Lambs:	Best	up to \$21
	Medium quality	\$11 to \$14
	Poorest	\$ 6 to \$ 8
Prime Sheep:	Best old ewes	up to \$12 (woolly to \$17)
	Heavy old ewes	\$8.50 to \$10.50
	Light old ewes	\$6.00 to \$ 7.50
Hoggets:	Best	up to \$20 (occasional sales to \$27.60)
	Medium	\$14.00 to \$17
	Store	\$11.90 to \$27.20

1.1.3 Store and Breeding Stock Prices

Store sheep prices may vary markedly between districts and seasons. The following tables are a guide to the average prices paid for store and breeding crossbred ewes throughout the country in 1986 (summarised from the livestock pages in the N.Z. Farmer).

	<u>North/Wkto</u>	<u>H.Bay/ Lwr NI</u>	<u>Cntbury</u>	<u>Otago/Sthlnd</u>
February:				
Ewe lambs	15.00	12.00	-	15.50
2ths	-	-	22.00	15.00
5yr ewes	10.00	12.00	15.00	8.50
March:				
Ewe lambs	-	12.00	-	20.00
2ths	-	24.00	23.00	26.00
5yr ewes	-	12.00	15.00	10.00
April:				
Ewe lambs	10.00	12.00	-	17.00
2ths	14.00	14.00	18.00	15.00
5yr ewes	10.00	12.00	-	7.00
May:				
Ewe lambs	9.00	8.00	-	15.00
2ths	11.00	-	-	14.00
5 yr ewes	8.50	-	-	6.50
June:				
Ewe lambs	8.00	10.00	-	15.50
2ths	12.00	11.00	20.00	-
5yr ewes	6.00	7.00	12.00	6.40
July:				
Ewe lambs	10.00	-	-	18.00
2ths	12.00	10.00	-	19.00
5yr ewes	9.50	5.00	-	11.00
August:				
Ewe lambs	12.00	-	-	-
2ths	16.00	12.00	-	25.00
5yr ewes	14.00	9.00	-	13.50

	<u>North/Wkto</u>	<u>H.Bay/ Lwr NI</u>	<u>Cntbury</u>	<u>Otago/Sthlnd</u>
September:				
Ewe lambs	-	-	-	-
2ths	-	17.00	-	25.00
5yr ewes	-	12.00	-	16.00
October:				
Ewe lambs	-	-	-	-
2ths	22.00	-	35.00	-
5yr ewes	-	-	-	-
November:				
Ewe lambs	-	-	-	-
2ths	23.00	21.00	35.00	36.00
5yr ewes	5.00	-	-	-
December:				
Ewe lambs	-	-	-	20.00
2ths	23.50	-	-	30.00
5yr ewes	15.00	13.00	-	9.00

1.2 WOOL

1.2.1 Wool Income Stabilisation Arrangements

Under its Minimum Prices Scheme, the Wool Board sets a table of minimum prices for all types of shorn wool and dead wool produced in New Zealand. Other than in exceptional circumstances, only one table of minimum prices shall be set in any one season, with movements in the target average of the table limited to a decrease of 5% and an increase of 10% on that of the previous season.

MINIMUM FLOOR PRICES: (Greasy)

1976/1977	.....	136 cents/kg
1977/1978	.....	150 cents/kg
1978/1979	.....	170 cents/kg
1979/1980	.....	200 cents/kg
1980/1981	.....	215 cents/kg
1981/1982	.....	250 cents/kg
1982/1983	.....	250 cents/kg
1983/1984	.....	250 cents/kg
1984/1985	.....	275 cents/kg
1985/1986	.....	330 cents/kg (443c clean)
1986/1987	.....	330 cents/kg (443c clean)

When the sale price of any wool falls below its appraised minimum price, the Board will supplement that price up to its minimum level through a supplementary payment made from the Minimum Wool Prices Funding Account held at the Reserve Bank of New Zealand. The Board may also provide minimum price support by purchasing the wool using its own funds and borrowing for that purpose, or by a combination of both supplementation and purchasing. Should the funds in the Account become exhausted, advances can be made from the Reserve Bank at an interest rate of 1% per annum.

At the beginning of each season, the Minister of Agriculture announces a 'trigger' price which is above the minimum price. This price is determined after consultations between the Ministry of Agriculture and Fisheries and the New Zealand Wool Board. Factors that affect the 'trigger' price are the ruling level of prices and prospects for wool as well as other farm products, the maintenance of an expanding sheep industry and the need to promote general economic stability in the economy.

The operation of the 'trigger' price is as follows:

The prices for each grade of wool at a particular sale are weighted up by the national volume of wool of each grade. As a result an Adjusted Weighted Average Sale Price (or commonly known as A.W.A.S.P.) is calculated based on the prices that were achieved at that particular sale and

the New Zealand volumes of each grade. It must be stressed that this A.W.A.S.P. value differs from the Actual Sale Average Price (or A.S.A.P.) because of the weighting using New Zealand volumes of wool.

In the event of the A.W.A.S.P. being above the predetermined 'trigger' price, a Grower Retention Levy is introduced on all shorn wool and dead wool. The levy is equivalent to 50% of the amount by which the A.W.A.S.P. exceeds the 'trigger' price, expressed as a percentage of the A.W.A.S.P. This percentage figure is then deducted from all wool sold at that particular sale and applies to all wool sold at that particular sale and applies to all wool sold privately up to the next auction. The percentage levy will usually change at this stage in response to actual prices changing.

The proceeds levied in this way are deposited in the Wool Income Retention Account at the Reserve Bank of New Zealand in the name of the individual grower. Deposits may be withdrawn at the discretion of the Minister of Agriculture. They will be available 5 years after the date of deposit, however, under special circumstances they may be withdrawn or refunded at an earlier date. These individual grower accounts will not attract tax until the date of withdrawal, neither will they accumulate interest during the time of deposit.

1986/87 Trigger Price remains at @ 500c (greasy).

The method of calculating the Grower Retention Levy is shown in the following hypothetical example:

1. The 'trigger' price for 1986/87.....500 c/kg
2. A.W.A.S.P. at a sale.....540 c/kg
3. Difference..... 40 cents
4. 'Specified Percentage' Retention

$$\frac{0.5 \times 40}{540} \times 100 \dots\dots\dots 3.7\%$$

Thus, the 'Specified Percentage' retention of 3.7% would be applied to the gross proceeds of all wool sold at that sale and nationally for all wool sold privately by growers until the next sale.

Note: This procedure has not been put into effect for several years but can still operate if deemed necessary.

Since 1976, the New Zealand Wool Board (previously the N.Z. Wool Marketing Corporation) has operated a Strata Price Control Scheme to limit the degree to which prices at any auction sale may vary from the price levels prevailing at the previous sale. To do this, the Board bids through a subsidiary (New Zealand Wools) at a fixed percentage below previous prices. In this way, steep falls in the market can be avoided, although it is inherent in the system that the Board could accumulate large stocks of wool on a falling market.

1.2.2 Wool Prices in late 1986

The following tables outline the prices obtained at a selection of sales during the latter part of the 1986 season.

North Island Sales:

	<u>Wngton</u> <u>28/8/86</u>	<u>Napier</u> <u>25/9/86</u>	<u>Wngton</u> <u>23/10/86</u>	<u>Wngton</u> <u>6/11/86</u>	<u>Napier</u> <u>28/11/86</u>
Crossbred					
32F2E B Fleece	-	578	564	572	571
34F2D Fleece	-	585	571	565	567
37F2D B Fleece	551	582	572	572	558
37F3D B/C Fleece	549	580	570	569	557
37F4F C Fleece	521	571	-	563	554
37F2L B 2/Shear	534	571	570	572	552
37F3L B/C 2/Shear	528	562	558	571	548
37G3F Av/Inf Soft					
Cotts	-	-	-	-	530
35P3G Av/Inf Pieces	-	-	-	-	502
35C3L Av/Inf 2/shr					
Bellies & Pcs	426	483	496	509	460

South Island Sales:

	Chch 14/8/86	Chch 26/9/86	Dunedin 11/10/86	Chch/Tmru 31/10/86	Dunedin 27/11/86
<u>Merino</u>					
21F2W B Fleece	-	879	867	878	878
22F1W BB/B Flce	-	818	-	837	846
22F2W B Fleece	-	810	813	832	839
23F2W B Fleece	-	759	-	761	777
<u>Quarterbred</u>					
24F2W B Fleece	-	686	671	677	677
<u>Halfbred</u>					
25F2W B Fleece	-	614	605	602	611
26F2W B Fleece	555	595	585	585	601
27F2W B Fleece	554	588	756	578	586
28F2W B Fleece	548	576	570	570	579
29F2W B Fleece	533	566	568	565	572
30F2W B Fleece	533	565	570	565	566
31F2W B Fleece	532	565	564	569	566
28P2X Av Pieces	470	531	-	545	-
<u>Crossbred</u>					
32F2E B Fleece	-	562	-	568	565
34F2D Fleece	548	573	-	573	560
37F2D B Fleece	537	576	574	574	562
37F3D B/C Flce	524	572	570	570	560
37F4F C Fleece	516	-	-	-	-
37F2L B 2/Shear	513	560	-	-	541
37F3L B/C 2/Shr	504	-	-	-	-
35P3G Av/Inf Pcs	414	483	485	516	509
35C3L Av/Inf 2/s Bels & Pcs	420	455	464	460	465

1.3 SKINS

Skin payments are published, along with sheep and lamb meat schedules, by the Freezing Companies.

The skin payments as at 8 December 1986 were as follows:

<u>Skin Payments (Pelt & Wool) cents Per Head</u> (South Island)					
<u>Lambs</u>		<u>Sheep</u>			
0.50 kg	780	0.05 kg	543	1.10 kg	832
0.55	795	0.10	552	1.15	834
0.60	810	0.15	561	1.20	854
0.65	825	0.20	570	1.25	865
0.70	840	0.25	579	1.30	876
0.75	855	0.30	588	1.35	885
0.80	870	0.35	597	1.40	897
0.85	885	0.40	606	1.45	910
0.90	900	0.45	610	1.50	923
0.95	915	0.50	654	1.55	936
1.00	930	0.55	668	1.60	950
1.05	945	0.60	680	1.65	963
1.10	960	0.65	690	1.70	976
1.15	975	0.70	701	1.75	989
1.20	990	0.75	711	1.80	1003
1.25	1005	0.80	723	1.85	1013
1.30	1020	0.85	733	1.90	1029
1.35	1035	0.90	745	1.95	1042
1.40	1050	0.95	756	2.00	1056
1.45	1065	1.00	794		
1.50	1080	1.05	820		

Seed wool and seedy pelts will be adjusted as follows:

Light:	75 cents per head deduction.
Medium:	\$1.00 per head deduction.
Heavy:	\$1.25 per head deduction.

Deductions will also be made for black fibres of 10 cents per kilo. Inferior and cotted full wools and ribby type pelts are also subject to deductions:

Sheep	\$1.50 per head
Lambs	\$1.00 per head.

1.4 CATTLE

1.4.1 Export Meat Schedule

The beef schedule works in the same way as does the sheep meat schedule. An example is shown below.

MEAT EXPORTERS' SCHEDULE PRICES TO PRODUCER (S.I.) Effective from 8 December 1986

Prices are quoted cents/kg delivered to nearest port works.

GRADE	WT RANGE KG	OX	CENTS PER KG	COW
			HEIFER	
P1	160.0-195	-	177.5	164.5
P1	195.5-220	184.5	184.5	172.5
P1	220.5-245	194.5	194.5	175.5
P1	245.5-270	200.5	200.5	182.5
P1	270.5-295	206.5	207.5	188.5
P1	295.5-320	208.5	-	-
P1	320.5-345	214.5	-	-
P1	Over 345.5	217.5	-	-
G	160-195	-	168.5	159.5
G	195.5-220	175.5	175.5	167.5
G	220.5-245	185.5	185.5	170.5
G	245.5-270	191.5	191.5	177.5
G	270.5-295	197.5	198.5	183.5
G	295.5-320	199.5	-	-
G	320.5-345	205.5	-	-
G	Over 345.5	208.5	-	-
L1	160-195	-	185.5	X
L1	195.5-220	190.5	190.5	X
L1	220.5-245	194.5	194.5	X
L1	245.5-270	200.5	200.5	X
L1	270.5-295	206.5	206.5	X
L1	Over 295.5	213.5	-	X
L2	160-195	-	175	X
L2	195.5-200	180	180	X
L2	220.5-245	184	184	X
L2	245.5-270	188	188	X
L2	270.5-295	194	194	X
L2	Over 295.5	201	-	X

GRADE	WT RANGE KG	OX	CENTS PER KG		COW
			HEIFER		
M	Under 145	151	151		151
M	145.5-170	172	172		172
M	170.5-195	176	176		176
M	195.5-220	181	181		181
M	Over 220.5	185	185		185
T	160-270	174.5	174.5		167.5
T	270.5-295	180.5	180.5		174.5
T	Over 295.5	184.5	184.5		178.5
E	160-270	164.5	164.5		159.5
E	270.5-295	170.5	170.5		167.5
E	Over 295.5	174.5	174.5		170.5
BULL	U/195	191			
	195.5-220	208			
	220.5-245	216			
	245.5-270	220			
	270.5-295	224			
	295.5-320	227			
	320.5-345	232			
	Over 345.5	238			

Deductions:

	<u>per head</u>
Federated Farmers Levy	
- Cow	0.27
- Other	0.18
Disease Eradication Levy	2.50
N.Z.M.P.B. Levy	2.00
Total - Cow	\$4.77
- Other	\$4.68

1.4.2 Local Cattle Prices

As with sheep, the markets at Addington and Burnside tend to set the market in the South Island, and Papakura for the North Island.

Prices for prime cattle paid at the Addington sale on 19 December 1986 were as follows:

Heavy steers	to \$900 with some sales to \$1236
Medium steers	\$540 to \$660
Light steers	\$350 to \$566
Heavy heifers	to \$566
Medium heifers	\$420 to \$470
Light heifers	\$342 to \$420
Heavy cows	to \$652
Medium cows	\$430 to \$470
Light cows	\$252 to \$400

1.4.3 Store and Breeding Stock Prices

The following tables are a guide to the average prices paid for store and breeding cattle throughout the country last year (summarised from the Livestock pages in the N.Z. Farmer).

	<u>North/Wkto</u>	<u>Hawkes Bay & Lwr N.I.</u>	<u>C'bury</u>	<u>Otago/ Southland</u>
February:				
2 1/2 yr steers	\$550	\$480	\$525	\$500
1 1/2 yr steers	\$440	\$400	\$450	\$465
Weaner steer	\$360	-	-	\$350
Weaner heifer	\$270	-	\$300	\$310
Breeding cow	\$500	\$460	\$450	-
March:				
2 1/2 yr steers	-	\$480	\$525	\$450
1 1/2 steers	-	\$440	\$425	\$370
Weaner steer	-	-	\$320	\$335
Weaner heifer	-	-	-	-
Breeding cow	-	\$500	-	-
April:				
2 1/2 yr steers	\$470	\$480	\$450	\$420
1 1/2 yr steers	\$370	\$385	\$375	\$335
Weaner steer	\$260	\$254	\$270	\$234
Weaner heifer	\$200	\$185	\$215	\$158
Breeding cow	\$300	\$350	\$375	\$410

	<u>North/Wkto</u>	<u>Hawkes Bay & Lwr N.I.</u>	<u>C'bury</u>	<u>Otago/ Southland</u>
May:				
2 1/2 yr steers	\$400	\$360	-	\$369
1 1/2 yr steers	\$320	\$300	-	\$300
Weaner steer	\$204	\$190	\$260	\$200
Weaner heifer	\$155	\$120	\$205	\$138
Breeding cow	\$276	-		\$365
June:				
2 1/2 yr steers	\$380	\$420	-	\$425
1 1/2 yr steers	\$300	\$375	-	\$320
Weaner steer	\$220	\$273	\$245	\$205
Weaner heifer	\$150	\$180	\$195	\$170
Breeding cow	\$250	\$280	\$330	\$350
July:				
2 1/2 yr steers	\$410	\$430	-	\$425
1 1/2 yr steers	\$335	\$340	-	\$350
Weaner steer	\$234	\$220	-	\$240
Weaner heifer	\$175	\$150	-	\$150
Breeding cow	\$295	-	-	-
August:				
2 1/2 yr steers	\$515	\$500	-	\$450
1 1/2 yr steers	\$415	\$360	-	\$380
Weaner steer	\$228	\$250	-	\$320
Weaner heifer	\$190	\$180	-	\$260
Breeding cow	\$450	\$360	-	\$380
September:				
2 1/2 yr steers	\$530	\$550	-	\$480
1 1/2 yr steers	\$444	\$410	-	\$400
Weaner steers	\$295	\$325	-	\$300
Weaner heifer	\$220	\$260	-	\$240
Breeding cow	\$480	\$400	-	\$390
October:				
2 1/2 yr steers	\$650	-	\$580	-
1 1/2 yr steers	\$445	-	\$500	-
Weaner steer	\$300	-	\$380	-
Weaner heifer	\$250	-	\$350	-
Breeding cow	\$450	-	\$550	-

	<u>North/Wkto</u>	<u>Hawkes Bay & Lwr N.I.</u>	<u>C'bury</u>	<u>Otago/ Southland</u>
November:				
2 1/2 yr steers	\$600	\$570	-	\$520
1 1/2 yr steers	\$375	\$470	-	\$450
Weaner steer	\$300	\$360	-	\$365
Weaner heifer	\$280	\$270	-	\$320
Breeding cow	\$450	\$530	-	-
December:				
2 1/2 yr steers	\$575	\$510	-	\$440
1 1/2 yr steers	\$455	\$435	\$525	\$360
Weaner steer	\$330	\$280	\$370	\$240
Weaner heifer	\$255	\$225	\$340	\$140
Breeding cow	\$450	\$400	-	-

1.5 DAIRY PRODUCE

1.5.1 Whole Milk for Manufacture

In June, the Dairy Products Prices Authority fixes two values, one for milkfat and one for solid-not-fat (S.N.F.). When these prices are known, the New Zealand Dairy Board fixes the actual product purchase prices, i.e. the prices for butter, cheese, milk powders, etc. Costs of milk collection and manufacturing are included. The Board may adjust the prices, by up to 5% of the basic milkfat price to achieve a desired product range. If the reaction of the manufacturing companies to the price is favourable, the prices are confirmed and the companies are then committed to manufacture not less than 90% of the products as set out in their programs.

The companies are paid by the N.Z. Dairy Board on the 20th of each month. After the companies have deducted their manufacturing and administrative costs, and have possibly withheld amounts for capital development, they pay the residual amount to their suppliers on the 20th.

The advance payment is usually 75% (Tai Tapu Central Co-op Dairy Company Ltd - 80%) of the Dairy Board Basic Price, and the final adjustment for the year is made in August, although most companies make interim payments.

The wholemilk price for the 1986/87 season was set by the Prices Authority in June 1986 at 225 cents per kg milkfat. This was increased in November to 255 cents and paid retrospectively. This will be reviewed again early in 1987 and may be adjusted depending on the seasons' production and the state of the New Zealand dollar.

Tai Tapu Central Co-op Dairy Factory payout announced in June was 180c per kg milkfat (80% of Prices Authority price) but is currently:

Finest	195 cents per kg milkfat
First grade	180 cents per kg milkfat
Second grade	155 cents per kg milkfat

Note: In any month where a producer has more than 3 second grades, any further second grade milk incurs an extra 40 cents per kg milkfat penalty i.e. payout is only 115 cents per kg. The penalty for antibiotics is 40 cents per kg and for added water 30 cents per kg.

1.5.2 Whole Milk for Town Supply

The New Zealand Milk Board has approved prices for quota milk which are based on the equivalent of 300 c/kg milkfat for wholemilk at farm gate. Note that the price now incorporates the chilling margin which was previously paid as a separate allowance. There has also been a major revision of grading differentials with the introduction of a premium grade, the application of penalties on a percentage of price basis (rather than fixed monetary penalties) and a substantial increase in the penalty for second grade.

The basis of payout for quota milk is the same as for last year and the quota percentages are incorporated in the table below. All milk produced in excess of the percentages will be paid for at surplus prices.

The following tables detail payout percentages and prices for all quota and surplus milk supplied during the year commencing 1 September 1986 (all prices are in cents per litre).

CANTERBURY DAIRY FARMERS LIMITED

Quota:

	<u>Sept</u>	<u>Oct/Jan</u>	<u>Feb.</u>	<u>March</u>	<u>April</u>	<u>May/Aug</u>
Quota %	112	105	112	112	115	120
Fnst Grde (Base Price)	22.00	17.00	17.00	22.00	22.00	28.00
Premium Grade (+2% prm)	+0.44	+0.34	+0.34	+0.44	+0.44	+0.56
First Grade (-3% pnty)	-0.66	-0.51	-0.51	-0.66	-0.66	-0.84
Second Grade (-30% pnty)	-6.6	-5.1	-5.1	-6.6	-6.6	-8.4
Second Grade* (-10% pnty)	-2.2	-1.7	-1.7	-2.2	-2.2	-2.8

* **Note:** The 10% second grade penalty applies only to the total solids test. All other 2nd Grade Milk is subject to the 30% penalty.

Surplus:

The advance price paid is 6c per litre for September and October and 8c per litre after that date. Eventual payout will be equivalent to manufacturing dairy prices.

Note: The 10% second grade penalty applies only to total solids tests. All other second grade milk is subject to the 30% penalty.

1.5.3 Dairy Cattle Prices

The differences in the prices paid for dairy cattle in the various districts of the country are not solely attributable to locality. They are dependant on the type of dairying carried out (i.e. town milk or factory supply), the other farming systems in the district, and the time of year.

The following table is a guide to the variation in dairy cattle during the last year.

	<u>Nth/Wkto</u>	<u>C'bury</u>	<u>Otago/SthInd</u>
February:			
Fresian 2nd/3rd calver	500	600	625
Jersey 2nd/3rd calver	300	425	450
Fresian heifer ic or rwb	600	350	540
Jersey heifer ic or rwb	200	300	350
March:			
Fresian 2nd/3rd calver	-	550	-
Jersey 2nd/3rd calver	-	400	-
Fresian heifer ic or rwb	-	350	-
Jersey heifer ic or rwb	-	300	-
April:			
Fresian 2nd/3rd calver	400	480	-
Jersey 2nd/3rd calver	300	380	-
Fresian heifer ic or rwb	350	500	-
Jersey heifer ic or rwb	280	380	-
May:			
Fresian 2nd/3rd Calver	337	420	400
Jersey 2nd/3rd calver	277	360	320
Fresian heifer ic or rwb	293	450	360
Jersey heifer ic or rwb	253	360	270

	<u>Nth/Wkto</u>	<u>C'bury</u>	<u>Otago/Sthlnd</u>
June:			
Fresian 2nd/3rd Calver	300	410	400
Jersey 2nd/3rd Calver	250	-	310
Fresian heifer ic or rwb	350	450	340
Jersey heifer ic or rwb	280	-	260
July:			
Fresian 2nd/3rd Calver	450	-	-
Jersey 2nd/3rd Calver	305	-	-
Fresian heifer ic or rwb	300	-	-
Jersey heifer ic or rwb	200	-	-
August:			
Fresian 2nd/3rd Calver	300	-	-
Jersey 2nd/3rd Calver	250	-	-
Fresian heifer ic or rwb	280	-	-
Jersey heifer ic or rwb	180	-	-
September:			
Fresian 2nd/3rd Calver	400	-	340
Jersey 2nd/3rd Calver	380	-	-
Fresian heifer ic or rwb	380	-	300
Jersey heifer ic or rwb	280	-	-
October:			
Fresian 2nd/3rd Calver	500	550	-
Jersey 2nd/3rd Calver	360	375	-
Fresian heifer ic or rwb	450	460	-
Jersey heifer ic or rwb	200	350	-
November:			
Fresian 2nd/3rd Calver	180	-	-
Jersey 2nd/3rd Calver	80	-	-
Fresian heifer ic or rwb	500	-	-
Jersey heifer ic or rwb	380	-	-
December:			
Fresian 2nd/3rd Calver	475	400	375
Jersey 2nd/3rd Calver	350	350	300
Fresian heifer ic or rwb	430	450	350
Jersey heifer ic or rwb	200	300	300

1.6 PIG PRODUCTION

1.6.1 Pork Prices

The Pork Marketing Board has set a minimum price to maintain the viability of pig production. The Canterbury Frozen Meat Company operates at this schedule, as set out below.

MEAT SERVICES LIMITED

A Member of the C.F.M. Group of Companies
Pig Schedule effective as from Monday 8 December 1986

Note: Weight ranges and payments based on "hot" scale weight, head and feet on.

Hot Weights		<u>cents per kilogram</u>
27.5 - 45 kg	PRIME	290 cents per kilogram
	CHOICE	265 cents per kilogram
	STANDARD	230 cents per kilogram
	MUTILATED	230 cents per kilogram
45.5 - 72 kg	PRIME	261 cents per kilogram
	CHOICE	244 cents per kilogram
	STANDARD	205 cents per kilogram
	MUTILATED	205 cents per kilogram
72.5 - 83 kg	PRIME	233 cents per kilogram
	STANDARD	175 cents per kilogram
	MUTILATED	175 cents per kilogram
Premiums		
27.5 - 45 kg	PRIME 10 mm and less	10 cents per kilogram
45.5 - 54 kg	PRIME 12 mm and less	20 cents per kilogram
54.5 - 63 kg	PRIME 14 mm and less	20 cents per kilogram
63.5 - 72 kg	PRIME 16 mm and less	20 cents per kilogram

Manufacturing

All weights 100 cents per kilogram

These prices are subject to change at short notice.

Deductions:

Levies -	Pork Industry Council Administration)	\$2.90
	Pork Marketing Board Stabilisation Levy)	
	Federated Farmers Levy	.01
	Meat Inspection Fees	<u>\$2.60</u>
	TOTAL PER PIG	<u>\$5.51</u>

1.6.2 Live Pig Sales

Most pork is sold on the local fresh meat market where returns are higher. Most weaners and store pigs are sold between farmers by private contract with prices based on the schedules for slaughter pigs. Breeding stock are marketed similarly with premiums for stock with a Performance Testing background. A limited number of all classes of stock are sold at auction through saleyards.

Prices at Addington 9 December 1986 were:

		<u>Low</u>	<u>High</u>
Prime pork	Light	\$100	\$120
	Med/Hvy	\$120	\$140
Bacon	Lt/med	\$150	\$170
	Heavy		\$206
Choppers	Light	\$120	\$160
	Heavy	\$170	\$220
Store weaners	Small	\$ 43	\$ 50
	Good	\$ 54	\$ 62
Slips and small stores		\$ 65	\$ 80
Large stores		-	\$100

The following tables are a guide to pig prices over the last year and are summarised from the livestock pages published in the N.Z. Farmer:

	<u>Weaners</u>	<u>Prime under 50 kg</u>	<u>Prime under 75 kg</u>	<u>Choppers over 100 kg</u>
February:	\$	\$	\$	\$
North Island	45	75	105	140
Canterbury	30	75	100	110
March:				
North Island	-	-	-	-
Canterbury	30	75	100	110
April:				
North Island	30	80	100	130
Canterbury	26	60	80	-

	<u>Weaners</u>	<u>Prime under 50 kg</u>	<u>Prime under 75 kg</u>	<u>Choppers over 100 kg</u>
May:				
North Island	32	87	118	135
Canterbury	34	70	80	100
June:				
North Island	30	90	105	180
Canterbury	38	80	95	100
July:				
North Island	47	82	110	155
Canterbury	-	-	-	-
August:				
North Island	49	105	117	200
Canterbury	-	-	-	-
September:				
North Island	54	95	127	210
Canterbury	-	-	-	-
October:				
North Island	60	130	150	150
Canterbury	55	130	180	-
November:				
North Island	50	120	140	200
Canterbury	-	-	-	-
December:				
North Island	50	145	193	285
Canterbury	45	150	210	220

1.7 GOAT PRODUCTION

1.7.1 Introduction

Within recent years the position of the goat as a farm animal has changed from being a noxious animal to one that can form the basis of a viable farming enterprise. Production from goats can be divided into three categories: the production of meat, milk and fibres. In conjunction with these, goats can be employed as a viable alternative in weed control. All aspects of the goat industry are still within their infancy, but are at present experiencing a period of growth. Meat production from feral goats has the highest output but the lowest unit value, whilst milk and fibre have respectively lower outputs but higher unit values.

1.7.2 Chevon Production

Chevon differs from mutton in that it has a lower fat percentage. This values chevon for export to countries where consumer demands require lean meat. The majority of chevon exported from New Zealand is derived from the feral goat population of New Zealand. Prices paid for feral goats for meat vary, but generally worth \$1.00 to \$1.50 per kg carcase weight. Preferred are animals between 10-15 kg liveweight. Goats are killed at several freezing works around the country during the off season. Game meat packing houses will also accept feral but not farmed goats.

So far there is no grading system for chevon in New Zealand, however as markets expand a system will have to be devised. Carribean, Asian and Mediterranean countries are the main importers of New Zealand chevon.

Male animals, both wethers and bucks, provide the bulk of animals for slaughter as, at present, feral does are worth far in excess of meat value for breeding purposes. Does for upgrading have, with the recent boom, been known to fetch up to \$140 per head. This situation is unlikely to last for very long as numbers available for breeding increase rapidly.

1.7.3 Goats Milk Production

Milk is produced from specially selected breeds such as the Saanen, Toggenburg, British Alpine and Anglo Nubian. Milk produced is processed as either raw milk, dried milk powder or cheese. Raw milk is marketed privately by the producer through supermarket and deli- catessen outlets or alternatively by co-operatives. The gross return to the producers per litre, varies as to the producer's direct or indirect distributing method, and is fetching approximately 38c to 42c per litre in the Nelson area at present.

Producers of goats milk in the Tasman/Nelson area have successfully produced goats milk cheese. The return from cheese making to the producer is about the same as above.

1.7.4 Mohair

The Mohair Producers' Association of New Zealand operates a pool where mohair and Angora x feral crossbred fibre (cashgora) is classified and offered for sale by tender. Prices realised from Pool 2/86 (May) are as follows:

Fine:A Kid	\$28.10
B Kid	\$18.75
2nd Kid	\$19.10
B 2nd Kid	\$21.00
Medium Fine:Young Goat	\$20.85
2nd Young Goat	\$15.00
Medium:A Doe	\$12.00
B Doe	\$18.00
2nd Doe	\$10.10
A Crossbred Doe	\$9.20
Strong:A buck	\$11.00
2nd buck	\$8.50
Cashmere A and B brown	\$110.00
Cashgora A	\$43.65
Cashgora B	\$22.00
Cashgora C	\$12.60
Cashgora (coloured)	\$20.00

The bulk of Mohair is exported worldwide, a small quantity being purchased by New Zealand manufacturers. Mohair also finds a small but ready market in private sales to homecraft interests.

New and lucrative markets for Angora-cross fibre have been established in Japan.

1.7.5 Stock

Average prices in December 1986 were as follows:

Pure-bred m.a. does	Average \$ 2850	Range \$2500 to \$ 3050
Grade one does	Average \$ 1100	Range \$1000 to \$ 1200
Grade two does	Average \$ 550	Range \$ 450 to \$ 650
Grade three does	Average \$ 395	Range \$ 325 to \$ 525
Grade four does	Average \$ 225	Range \$ 200 to \$ 250
Pure bred bucks	Average \$ 790	Range \$ 600 to \$ 4000
Grade one bucks	Average \$ 600	
Grade one hoggets	Average \$ 525	
Grade two hoggets	Average \$ 325	Range \$ 300 to \$ 350
Grade three hoggets	Average \$ 180	Range \$ 150 to \$ 210
Grade four hoggets	Average \$ 175	
Grade four kids	Average \$ 160	

1.7.6 Cashmere

Cashmere is the very fine undercoat or down fibre obtained from certain types of goat and is separated from its associated coarse guard hair.

All fibre is eventually shipped to Australia where it is sold according to a schedule of prices, based on average fibre diameter and colour.

Dawson International Prices

100% Cashmere down contents

White	\$142-183 per kg
Grey	\$ 75-137 per kg
Brown	\$ 50-102 per kg

1.8 DEER PRODUCTION

1.8.1 Introduction

Deer farming in New Zealand has developed into an established enterprise with much promise as an export earner through sales of the two main products which are venison and velvet antlers.

1.8.2 Velvet (1985/86 Pool Prices available December 1986)

Grade	1st	2nd	3rd	4th
A1	\$121.50	\$112.35	\$110.00	\$120.00
A2L	\$121.50	\$131.65	\$106.20	\$110.50
A2S	\$121.50	\$133.65	\$105.60	\$ 97.00
A3L	\$121.50	\$107.70	\$106.50	\$105.50
A3S	\$121.50	\$133.65	\$103.50	\$118.00
A4	\$121.50	\$123.10	\$125.00	\$115.80
B1	\$111.50	\$ 93.70	\$ 79.60	\$ 86.00
B2	\$111.50	\$ 97.70	\$ 81.50	\$ 86.50
B3	\$111.50	\$ 97.60	\$ 85.00	\$ 84.50
B4	\$111.50	\$113.20	\$120.00	\$110.80
C1	\$ 81.50	\$ 70.00	\$ 56.50	\$ 78.00
C2	\$ 81.50	\$ 70.50	\$ 57.60	\$ 83.00
C3	\$ 81.50	\$ 83.60	\$ 85.00	\$ 80.00
D1	\$ 23.00	\$ 21.50	\$ 18.50	\$ 19.34
D2	\$ 25.10	\$ 25.10	\$ 18.50	\$ 19.34
D3	\$ 70.50	\$ 65.00	\$ 73.50	\$ 48.00
D4	\$ 18.40	\$ 18.50	-	-

NOTE: Prices quoted are gross prior to pool charges and GIB levy.

1.8.3 Venison

Weekly schedules are now published by individual companies.
An example is shown here.

Red Deer; Wapiti and Hybrids Week beginning 12/12/86

		<u>North and South Islands</u>
AP1	70.1 kg & over	\$5.50
AP2	50.1-70.0 kg	\$5.75
AP3	50 kg & under	\$4.75
AD	1 primal damaged	\$2.50
AF	Overfat	\$3.25
AM	Manufacturing	\$1.50

Fallow Deer: Week beginning 20/1/86

North Island	- 1st Grade	\$5.75
	- 2nd Grade	\$4.50
	- 3rd Grade	\$3.00
	- 4th Grade	\$1.50
South Island	- 1st Grade	\$5.75
	- 2nd Grade	\$4.50
	- 3rd Grade	\$3.00
	- 4th Grade	\$1.50

1.8.4 Livestock

The following tables of live deer prices are summaries of information taken from the livestock pages of the N.Z. Farmer during 1986 and are published here as a guide to the variations in prices that occurred.

	<u>North Island</u>	<u>Canterbury</u>	<u>Otago/Sthlnd</u>
February:			
Weaner yrlg hinds	-	-	-
18 mth/2 yr hinds	-	-	\$2300
M.A. Hinds	-	-	\$2500
Weaner/yrlg stags	-	-	\$ 300
18 mth/2 yr stags	-	-	\$ 365
March:			
Weaner yrlg hinds	-	-	-
18 mth/2 yr hinds	-	\$2400	-
M.A. Hinds	-	-	-
Weaner/yrlg stags	-	-	-
18 mth/2 yr stags	-	-	-
April:			
Weaner yrlg hinds	\$1000	\$1200	\$ 950
18 mth/2 yr hinds	\$1800	\$1200	\$1800
M.A. Hinds	\$1100	\$1800	\$1900
Weaner/yrlg stags	\$ 250	-	\$ 240
18 mth/2 yr stags	-	\$ 325	\$ 340

	<u>North Island</u>	<u>Canterbury</u>	<u>Otago/Sthlnd</u>
May:			
Weaner yrlg hinds	\$1200	\$1100	\$ 975
18 mth/2 yr hinds	\$1600	\$2000	\$1710
M.A. Hinds	\$1367	\$1800	\$1800
Weaner/yrlg stags	\$ 480	-	\$ 215
18 mth/2 yr stags	\$ 275	\$ 325	\$ 280
June:			
Weaner yrlg hinds	\$1000	\$1100	\$1750
18 mth/2 yr hinds	\$1125	\$2000	\$1750
M.A. Hinds	\$1350	\$1800	\$1450
Weaner/yrlg stags	\$ 220	-	\$ 200
18 mth/2 yr stags	\$ 300	\$ 300	\$ 300
July:			
Weaner yrlg hinds	\$ 725	-	\$1000
18 mth/2 yr hinds	\$1350	-	\$1450
M.A. Hinds	\$ 900	-	\$1425
Weaner/yrlg stags	\$ 200	-	\$ 215
18 mth/2 yr stags	\$ 350	-	\$ 350
August:			
Weaner yrlg hinds	\$ 850	-	\$1000
18 mth/2 yr hinds	\$1500	-	\$1500
M.A. Hinds	\$1000	-	\$1600
Weaner/yrlg stags	\$ 200	-	\$ 220
18 mth/2 yr stags	\$ 350	-	-
September:			
Weaner yrlg hinds	\$ 925	-	\$1000
18 mth/2 yr hinds	\$1500	-	\$1450
M.A. Hinds	\$1200	-	\$1750
Weaner/yrlg stags	\$ 245	-	\$ 320
18 mth/2 yr stags	\$ 350	-	\$ 300
October:			
Weaner yrlg hinds	\$1200	\$1200	-
18 mth/2 yr hinds	\$1400	\$1600	-
M.A. Hinds	\$1600	\$1300	-
Weaner/yrlg stags	\$ 260	\$ 250	-
18 mth/2 yr stags	-	-	-

	<u>North Island</u>	<u>Canterbury</u>	<u>Otago/Sthlnd</u>
November:			
Weaner yrlg hinds	\$ 800	-	\$1400
18 mth/2 yr hinds	\$1735	-	\$1700
M.A. Hinds	\$1660	-	\$1700
Weaner/yrlg stags	\$ 280	-	-
18 mth/2 yr stags	\$ 400	-	-
December:			
Weaner yrlg hinds	\$1100	-	\$1350
18 mth/2 yr hinds	\$1800	\$2200	\$2000
M.A. Hinds	\$2000	-	\$2200
Weaner/yrlg stags	\$ 250	\$ 280	\$ 250
18 mth/yrlg stags	-	-	\$ 300

1.9 CROPS

1.9.1 Wheat

On the basis of the 1986 pricing agreement the price payable to the New Zealand grower F.O.B. or L.S.D. for 100 index milling grade wheat is quoted weekly by the New Zealand Wheat Board.

For the week commencing 8 December 1986 the floor price will be \$274 per tonne delivered.

Contracts are available through the Mills and terms vary considerably. They may be fixed prices - usually in the range of \$210 to \$220 per tonne, or at a price based on the N.Z. Wheat Board quote at the date of delivery. Advances are available with most contracts.

1.9.2 Barley

The Canterbury New Zealand Malting Company contract price for No. 1 Grade Malting barley for the 1986 harvest is \$180 per tonne in the South Island (delivered Heathcote) or \$170 per tonne (delivered Rakaia or Ashburton), and \$220 per tonne in the North Island (delivered Marton).

For barley with a screening percentage greater than 5%, the following penalties will apply:

\$1.00 per 1% over 5% up to and including 10% (S.I.) and 15% (N.I.).

Where the malting company requires the contracted grower to store the barley, a storage increment will be paid at the rate of \$6.50 per tonne for delivery during the month of May and a further \$3.75 per tonne per month thereafter. Where the company requires the barley to be stored, the contract price will be paid following delivery and grading.

Contract price for seed barley in 1986/87 is about \$180 per tonne. There is very little difference between cultivars. The above are South Island prices and it is likely that due to less barley being grown in the North Island that prices there would be above those quoted.

The price for feed barley grown on contract is about \$150 per machine treated tonne delivered Christchurch.

Free bake this year is likely to be a little less than this - dependant on quality.

1.9.3 Oats

The price offered for good quality feed grade oats this season is \$170/tonne contract.

1.9.4 Peas

The prices offered for field dressed peas in bulk grown under contract for the 1987 harvest are:

1. **Field peas** - within the range \$300 to \$400 per tonne.
2. **Garden peas** - within the range \$300 to \$400 per tonne.
Varies depending on cultivar.
Paid on M/D weight.
Approximately 45% payout at harvest and the balance in September.

Note: All the above prices are for bulk seed. Growers are recompensed for sacks if the crop is sold bagged rather than bulk.

3. Freezer peas -

<u>Grade</u>	<u>Tenderometer Reading</u>	<u>\$ per tonne packed weight (excl. GST)</u>
0	not exceeding 90	309.70
1	over 90, not over 95	287.85
2	over 95, not over 100	262.15
3	over 100, not over 105	234.45
4	over 105, not over 110	212.70
5	over 110, not over 115	203.80
6	over 115, not over 120	188.95
7	over 120	172.15

Note: Freezer pea crops that are passed over are paid for at the market price for seed peas when they are harvested and dressed.

1.9.5 Beans

Beans grown for process freezing are paid for on the following scale.

<u>Grade</u>	<u>Average Seed Length</u>	<u>\$ per tonne packed weight (excl. GST)</u>
0	not exceeding 8.5mm	254.60
1	over 8.5mm, not over 9mm	247.45
2	over 9mm, not over 9.5mm	241.65
3	over 9.5mm, not over 10mm	237.15
4	over 10mm, not over 10.5mm	232.75
5	over 10.5mm, not over 11mm	230.15
6	over 11mm, not over 11.5mm	228.40
7	over 11.5mm, not over 12mm	226.65
8	over 12mm, not over 12.5mm	224.95
9	over 12.5mm, not over 13mm	223.25
10	over 13mm	221.25

1.9.6 Cauliflower

Cauliflower grown for process freezing is paid for at \$435 per tonne packed weight spring harvest, and at \$405 per tonne packed weight (autumn/winter harvest).

1.9.7 Broccoli

The 1987 harvest price will be \$473 per tonne.

1.9.8 Potatoes

Prices for potatoes vary a lot during a season, due to several factors including the areas planted, the yield per hectare and weather conditions.

Process Potatoes -

Price paid for process potatoes of acceptable quality in the 1986/87 season is based on a sliding scale and ranges from \$123.20 per tonne (70% large and 30% small) to \$143 per tonne (100% large).

(N.B. small 112 to 170g, large over 170g)

Deductions will be made for diseased or defective potatoes, where earth content is greater than 1% of total weight, and for rocks or other foreign material.

Allowances of \$2.75 per tonne will be made for grower owned bins and of \$2.75 per tonne delivered in bulk. (Both include GST).

1.9.9 Lupins

Very few lupin seed crops are grown at present, presumably as the result of reluctance on the part of the farmers to grow a relatively risky crop. It is estimated that good quality lupin seed would fetch in the vicinity of \$300 per tonne.

1.10 SMALL SEEDS

The price paid for small seeds is based on machine dressed weights which depend on the purity of the seed line. As at December 1986, many prices had not been finalised and those shown below are estimated values only, for first generation certified seed.

Grass Seed:	\$
Ruanui Ryegrass	1.40
Nui Ryegrass	1.40
Ariki Ryegrass	1.20
Manawa Ryegrass	0.90
Paroa Italian Ryegrass	0.75
Tama Ryegrass	1.10
Moata Ryegrass	1.10
Ellett	1.40
Concord	1.20
Coronet	3.00
Droughtmaster	1.40
Apanui Cocksfoot	1.80
Wana Cocksfoot	1.80
Crested Dogstail	2.75
Matua Prairie Grass	1.60
Browntop	4.50
Egmont (Browntop)	4.50
Sefton (Browntop)	4.00
Fescue (lawn)	4.00
Roa	4.50
Phlaris	5.00
Kahu	2.50
Saborto	2.20
Timothy	4.00
Massey Basyn (Yorkshire Fog)	3.00
Yarrow:	12.00
Lotus:	
Maku	15.00
Corniculatus	7.50

Clover Seed:

Huia White	3.00
Pitau	2.80
White Clover overseas cultivars	3.75
Tahora	4.50
Turoa Montgomery Red	4.00
Hamua Broad Red	3.00
Pawera	7.50

Lucerne:	4.00
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Kale:

Medium Stemmed	1.80-2.00
Giant	1.80-2.00

Turnips:	1.50
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1.11 FRUIT PRODUCTION

Prices paid to producers or growers for fruit vary markedly (sometimes by several hundred percent) both within and between years and between districts. They vary daily and are very much dependant on climate and its subsequent effect on both availability and quality of fruit offered for sale. Both the location of property in relation to population centres, and the amount of produce that an individual producer provides over the course of a season also influences prices received. Whether the produce is for local consumption or for export is another major influence.

Auction price information is usually confidential and so it is very difficult for a publication such as this to obtain accurate prices for a range of fruit.

It must be emphasised that the following information is published as a guide to the variation in prices that occur and should only be used for demonstration purposes, NOT for accurate budgeting or comparison of enterprises.

The prices paid to growers by Christchurch Markets in 1985 were as follows:

	<u>Apples</u> per kg	<u>Apricots</u> per half case-20lb	<u>Avocados</u> per tray (14 in a tray)
October 1984	86c-\$1.55	-	\$20.00-\$ 35.00
November	86c-\$1.62	-	\$20.00-\$ 35.00
December	-	-	\$20.00-\$ 30.00
January 85	-	\$10.00-\$15.00	\$25.00-\$ 40.00
February	68c-\$1.06	\$ 8.00-\$18.00	\$20.00-\$ 30.00
March	90c-\$1.13	\$16.00-\$25.00	\$20.00-\$ 35.00
April	90c-\$1.13	-	\$30.00-\$ 45.00
May	90c-\$1.32	-	\$20.00-\$ 45.00
June	\$1.18 -\$1.26	-	\$50.00-\$100.00
July	\$1.25 -\$1.64	-	\$15.00-\$ 40.00
August	97c-\$1.63	-	\$15.00-\$ 32.00
September 1985	97c-\$1.47	-	\$20.00-\$ 35.00

	<u>Cherries</u> per kg	<u>Grapefruit</u> per bushell	<u>Grapes</u> per 2.5kg tray
October 1984	-	\$10.00-\$16.00	-
November	\$ 2.00-\$12.00	\$10.00-\$23.00	-
December	\$ 3.00-\$ 4.00	\$20.00-\$30.00	-
January 1985	\$ 3.50-\$ 5.00	-	-
February	-	-	\$12.00-\$ 16.00
March	-	-	\$12.00-\$ 17.00
April	-	-	\$16.00-\$ 18.20
May	-	\$16.00-\$20.00	\$16.00-\$ 17.00
June	-	\$12.00-\$20.00	\$17.00-\$ 19.00
July	-	\$10.00-\$16.00	-
August	-	\$10.00-\$17.00	-
September	-	\$10.00-\$16.00	-

	<u>Kiwifruit</u> per 12 kg	<u>Lemons</u> per bushell	<u>Mandarins</u> per half case
October 1984	\$16.00-\$25.00	\$12.00-\$18.00	\$12.20
November	\$ 8.00-\$13.00	\$12.00-\$18.00	\$16.00-\$ 20.00
December	\$13.00-\$13.50	\$16.00-\$20.00	-
January 1985	\$12.00-\$13.50	\$16.00-\$25.00	-
February	\$15.00-\$18.00	\$16.00-\$20.00	-
March	-	\$18.00-\$22.00	-
April	\$10.00-\$11.00	\$12.00-\$22.00	-
May	\$ 5.00-\$7.00*	\$14.00-\$25.00	\$12.00-\$18.00
June	\$10.80-\$12.00	\$18.00-\$23.00	\$12.00-\$15.00
July	\$10.80-\$12.50	\$12.00-\$23.00	\$10.00-\$14.00
August	\$12.00-\$14.00	\$12.00-\$19.00	\$12.00-\$17.00
September	\$14.00-\$16.00	\$14.00-\$20.00	\$35.00-40.00**

* per tray ** per bushel

	<u>Nectarines</u> per tray	<u>Oranges</u> per bushell	<u>Passionfruit</u> per 1/4 carton
October 1984	-	\$15.00-\$24.00	\$14.00-\$20.00
November	-	-	-
December	\$12.00	-	-
January 1985	\$ 7.00-\$10.00	-	-
February	\$ 6.00-\$ 8.50	-	\$ 5.00-\$ 8.00
March	\$ 7.60-\$24.00	-	\$ 4.00-\$ 8.00
April	-	\$30.00-\$35.00	\$ 7.00-\$13.00
May	-	-	\$ 8.00-\$15.00
June	-	-	\$10.00-\$15.00
July	-	\$16.00-\$21.00	\$15.00-\$25.00
August	-	\$16.00-\$22.00	\$15.00-\$20.00
September	-	\$15.00-\$14.00	\$17.00-\$20.00

	<u>Peaches</u> per tray	<u>Pepinos</u> per tray	<u>Plums</u> per half case (20lb)
October 1984	-	-	-
November	-	-	-
December	\$ 5.00-\$10.00	-	\$10.00-\$20.00
January 1985	\$ 4.00-\$ 8.00	-	\$10.00-\$16.00
February	\$ 5.50-\$ 9.00	-	\$10.00-\$20.00
March	\$ 7.00-\$15.00	-	\$10.00-\$20.00
April	\$ 9.00-\$10.00	\$ 5.00-\$ 6.00	\$12.00-\$20.00
May	-	\$ 5.00-\$ 6.00	-
June	-	\$ 5.00-\$ 6.00	-
July	-	\$ 5.00-\$ 6.00	-
August	-	\$ 5.00-\$ 6.00	-
September	-	\$ 5.00-\$10.00	-

	<u>Raspberries</u> per tray	<u>Rockmellons</u> per 6-7 count	<u>Strawberries</u> per punnet
October 1984	-	-	\$ 1.50-\$ 4.00
November	-	-	\$ 1.50-\$ 2.00
December	\$11.00-\$12.00	-	\$ 9.00-\$12.00*
January 1985	\$12.00-\$16.00	\$10.00-\$12.00	\$12.00-\$20.00*
February	\$13.00-\$18.00	\$ 6.00-\$12.00	12.00-\$16.00
March	\$14.00-\$18.00	\$ 7.00-\$12.00	\$12.00-\$15.00
April	\$15.00-\$18.00	-	\$12.00-\$16.00*
May	-	-	-
June	-	-	-
July	-	-	-
August	-	-	-
September	-	-	-

* (per tray)

	<u>Tamarillos</u> per half case	<u>Tangelos</u> per bushell	<u>Watermellons</u> (per kg)
October 1984	\$14.00-\$30.00	\$16.00-\$22.00	\$ 1.00-\$ 1.50
November	\$30.00-\$40.00	\$15.00-\$22.00	\$ 1.00
December	\$30.00-\$40.00	\$18.00-\$22.00	-
January 1985	-	-	\$ 1.00-\$ 1.20
February	-	-	\$ 0.70
March	-	-	\$ 0.60
April	\$18.00-\$20.00	-	-
May	\$12.00-\$20.00	-	\$ 1.20
June	\$13.00-\$18.00	-	\$ 1.20
July	\$13.00-\$20.00	-	-
August	\$18.00-\$24.00	-	-
September	\$20.00-\$25.00	\$15.00-\$24.00	-

1.12 VEGETABLE PRODUCTION

As with fruit, the prices paid to growers for vegetables vary markedly (sometimes by several hundred percent) both within and between years and between districts. They vary daily and are very much dependant on climate and its subsequent effects on both availability and quality of vegetables offered. Again, as with fruit, the location of the property in relation to population centres, and the amount of produce that an individual producer provides of the course of a season also influences prices received.

Whether the produce is for local consumption or for export is another major influence for a small range of vegetables. Auction price information is usually confidential and so it is very difficult for a publication such as this to obtain accurate prices for a range of vegetables.

It must be emphasised that the following information is published as a guide to the variation in prices that occur and should be used for demonstration purposes only, NOT for accurate budgeting or comparison of enterprises.

The estimated prices paid to growers by Christchurch markets in 1985 were as follows:

	<u>Asparagus</u> per kg	<u>Beans</u> per kg	<u>Beetroot</u> per case
October 1984	\$ 2.00-\$ 3.50	-	\$ 3.00-\$ 6.00
November	\$ 2.00-\$ 3.20	\$10.00-\$14.00	\$ 3.00-\$ 7.00
December	\$ 2.00-\$ 3.50	\$10.00-\$12.00	\$ 3.00-\$ 4.00
January 1985	-	\$ 2.00-\$ 8.00	\$ 3.00-\$ 4.00
February	-	-	\$ 3.00-\$ 5.00
March	-	-	\$ 3.00-\$ 6.00
April	-	-	\$ 4.00-\$ 5.00
May	-	-	\$ 5.00-\$ 6.00
June	-	-	\$ 4.00-\$ 5.00
July	-	-	\$ 3.00-\$ 5.00
August	-	-	\$ 3.00-\$ 5.00
September	\$ 5.00-\$ 6.00	-	\$ 4.00-\$ 6.00

	<u>Broccoli</u> per half case	<u>Brussel Sprouts</u> per bag	<u>Cabbage</u> per bag
October 1984	\$12.00-\$20.00	-	\$ 2.50-\$12.00
November	\$ 4.00-\$16.00	-	\$ 2.00-\$10.00
December	\$ 6.00-\$11.00	-	\$ 4.50-\$ 7.00
January 1985	\$ 8.00-\$11.00	-	\$ 3.50-\$ 4.50
February	\$ 7.00-\$12.00	\$ 7.00-\$12.00	\$ 3.00-\$ 4.50
March	\$ 4.00-\$10.00	\$ 7.00-\$15.00	\$ 3.00-\$ 6.00
April	\$ 5.00-\$ 8.00	\$ 8.00-\$15.00	\$ 4.50-\$ 6.00
May	\$ 6.00-\$ 9.00	\$ 8.00-\$11.00	\$ 4.50-\$ 5.50
June	\$ 7.00-\$ 9.00	\$ 7.00-\$10.00	\$ 4.50-\$ 6.00
July	\$ 7.00-\$10.00	\$ 7.00-\$ 8.00	\$ 4.00-\$ 6.50
August	\$ 5.00-\$10.00	\$ 6.00-\$ 8.00	\$ 4.00-\$ 6.50
September	\$ 5.00-\$ 8.00	\$ 6.00-\$11.00	\$ 4.50-\$ 8.50

	<u>Capsicum</u> per 2 kg	<u>Carrots</u> per bag	<u>Cauliflower</u> per bag
October 1984	\$18.00-\$22.00	\$ 8.00-\$25.00	\$ 2.50-\$ 8.00
November	\$ 6.00-\$18.00	\$10.00-\$22.00	\$ 3.00-\$ 8.00
December	\$ 5.00-\$ 8.00	\$12.00-\$20.00	\$ 4.00-\$ 8.00
January 1985	\$ 3.00-\$ 4.50	\$ 5.00-\$10.00	\$ 6.00-\$ 9.00
February	\$ 1.50-\$ 2.50	\$ 3.00-\$ 6.00	\$ 5.00-\$ 9.00
March	\$ 1.50-\$ 2.00	\$ 3.00-\$ 6.00	\$ 4.00-\$ 9.00
April	\$ 1.40-\$ 3.00	\$ 4.00-\$ 6.00	\$ 3.50-\$ 8.00
May	\$ 1.40-\$ 7.00	\$ 4.00-\$ 7.00	\$ 3.50-\$ 8.00
June	\$ 8.00-\$12.00	\$ 4.00-\$ 6.50	\$ 3.00-\$ 8.00
July	\$10.00-\$16.00	\$ 4.00-\$ 6.80	\$ 2.00-\$ 4.50
August	\$12.00-\$16.00	\$ 4.00-\$11.40	\$ 3.50-\$10.00
September	\$14.00-\$20.00	\$ 5.50-\$18.00	\$ 5.00-\$ 8.00

	<u>Celery</u> per case	<u>Courgettes</u> per 10 kg	<u>Cucumbers</u> per 1/2 carton
October 1984	\$ 8.50-\$20.00	\$ 3.00-\$ 6.00	\$ 6.00-\$15.00
November	\$15.00-\$35.00	\$ 2.00-\$ 4.50	\$ 6.00-\$16.00
December	\$12.00-\$15.00	\$ 1.00-\$ 2.00	\$ 5.00-\$12.00
January 1985	\$ 8.00-\$16.00	\$ 4.00-\$ 8.50	\$ 3.00-\$ 6.00
February	\$ 5.00-\$ 8.00	\$ 4.00-\$10.00	\$ 2.00-\$ 4.00
March	\$ 5.00-\$10.00	\$ 6.00-\$12.00	\$ 1.50-\$ 3.50
April	\$ 6.00-\$ 9.00	\$14.00-\$26.00	\$ 4.50-\$12.50
May	\$ 6.00-\$10.00	\$30.00-\$36.00	\$ 8.00-\$20.00
June	\$ 6.00-\$ 9.00	\$36.00-\$50.00	\$10.00-\$23.00
July	\$ 6.00-\$10.00	\$50.00-\$62.50	\$ 8.00-\$20.00
August	\$ 6.00-\$10.00	\$40.00-\$58.00	\$ 9.00-\$17.00
September	\$ 9.00-\$12.50	\$40.00-\$45.00	\$ 8.00-\$15.00

	<u>Garlic</u> per 100g	<u>Kumara</u> per 15kg	<u>Leeks</u> per case
October 1984	\$ 4.00-\$10.00	\$20.00-\$26.00	\$ 4.50-\$ 6.50
November	\$ 6.00-\$10.00	\$12.00-\$24.00	\$ 3.00-\$10.00
December	\$ 5.00-\$ 8.00	\$15.00-\$25.00	-
January 1985	\$ 5.00-\$ 7.00	\$ 4.00-\$ 8.50	\$ 3.00-\$ 6.00
February	\$ 5.00-\$ 6.00	\$12.00-\$25.00	\$ 6.00-\$10.00
March	\$ 3.00	\$12.00-\$15.00	\$ 8.00-\$12.00
April	\$ 5.00	\$12.00-\$16.00	\$ 7.00-\$11.00
May	\$ 5.00	\$14.00-\$16.00	\$ 6.00-\$10.00
June	\$ 5.00-\$ 6.00	\$14.00-\$16.00	\$ 5.00-\$ 9.00
July	\$ 5.00-\$ 6.00	\$16.00-\$18.00	\$ 7.00-\$ 9.00
August	\$ 5.00-\$ 7.00	\$16.00-\$30.00	\$ 6.00-\$ 9.00
September	\$ 6.00-\$ 7.00	\$24.00-\$30.00	\$ 5.00-\$ 8.00

	<u>Lettuce</u> per case	<u>Marrows</u> per case	<u>Mushrooms</u> per 3 kg
October 1984	\$ 4.00-\$10.00	-	\$12.00-\$14.00
November	\$ 2.00-\$11.50	-	\$11.00-\$14.00
December	\$ 1.50-\$ 3.50	\$ 8.00-\$12.00	\$11.00-\$14.00
January 1985	\$ 4.00-\$ 6.50	\$ 2.00-\$ 5.00	\$12.00-\$14.00
February	\$ 3.00-\$ 9.00	\$ 1.50-\$ 2.00	\$10.00-\$14.00
March	\$ 4.00-\$ 8.50	\$ 1.50-\$ 3.00	\$11.00-\$14.00
April	\$ 4.00-\$11.00	\$ 2.50-\$ 3.50	\$11.00-\$14.00
May	\$ 3.00-\$ 6.00	\$ 2.50-\$ 3.50	\$11.00-\$14.50
June	\$ 4.00-\$ 6.00	\$ 2.50-\$ 3.50	\$11.00-\$20.00
July	\$ 4.00-\$ 9.00	\$ 3.50-\$ 5.00	\$13.00-\$24.00
August	\$ 7.00-\$17.50	-	\$18.00-\$22.00
September	\$ 4 9.00-\$17.50	-	\$13.00-\$18.00

	<u>Onions</u> per bag	<u>Parsley</u> per bunch	<u>Parsnip</u> per bag
October 1984	\$12.00-\$14.00	\$ 1.20-\$ 1.50	\$ 6.00-\$ 8.00
November	\$15.00-\$22.00	\$ 1.00-\$ 1.50	\$ 6.00-\$24.00
December	\$20.00-\$24.00	\$ 1.00-\$ 1.50	\$14.00-\$18.00
January 1985	\$ 9.00-\$19.00	\$ 1.50-\$ 2.00	\$14.00-\$16.00
February	\$ 6.00-\$10.00	\$ 2.00-\$ 4.00	\$ 6.00-\$ 9.00
March	\$ 6.00-\$10.00	\$ 3.00-\$ 3.50	\$ 6.00-\$ 9.00
April	\$ 5.00-\$10.00	\$ 2.00-\$ 3.00	\$ 5.00-\$ 7.00
May	\$ 5.00-\$10.00	\$ 2.00-\$ 3.00	\$ 5.00-\$ 9.00
June	\$ 6.00-\$ 8.00	\$ 2.50-\$ 4.00	\$ 4.50-\$ 6.50
July	\$ 5.00-\$ 8.00	\$ 3.00-\$ 4.50	\$ 4.00-\$ 6.00
August	\$ 6.00-\$ 8.00	\$ 4.00-\$ 5.00	\$ 4.00-\$ 6.80
September	\$ 6.00-\$ 8.00	\$ 3.00-\$ 5.50	\$ 4.00-\$ 6.80

	<u>Peas</u> per kg	<u>Potatoes</u> per bag	<u>Pumpkin</u> per 20 kg
October 1984	-	\$ 6.00-\$11.00*	\$ 5.50-\$10.00
November	\$ 1.00-\$ 3.00	\$ 6.00-\$20.00*	\$ 5.50-\$16.00
December	\$ 1.00-\$ 1.50	\$ 5.00-\$ 7.00*	\$ 8.00-\$16.00
January 1985	-	\$ 2.50-\$ 4.00	\$ 6.00-\$13.00
February	-	\$ 2.50-\$ 5.50	\$ 5.00-\$10.00
March	-	\$ 3.00-\$ 6.00	\$ 3.00-\$ 7.00
April	-	\$ 2.50-\$ 6.00	\$ 5.00-\$ 8.00
May	-	\$ 2.80-\$ 7.00	\$ 4.00-\$ 6.00
June	-	\$ 4.00-\$ 7.00	\$ 4.00-\$ 7.00
July	-	\$ 3.50-\$ 7.00	\$ 3.00-\$ 6.00
August	-	\$18.00-\$22.50*	\$ 3.00-\$ 6.00
September	-	\$15.00-\$17.00*	\$ 4.50-\$11.00

* New

	<u>Radish</u> per 12 bnchs	<u>Rhubarb</u> per 6 bunches	<u>Silverbeet</u> per 5 kg case
October 1984	\$ 3.00-\$ 4.00	\$ 2.00-\$ 5.00	\$ 2.00-\$ 4.50
November	\$ 3.00-\$ 4.00	\$ 1.50-\$ 2.50	\$ 4.00-\$ 8.00
December	\$ 3.00-\$ 3.60	\$ 2.00-\$ 2.50	\$ 5.00-\$ 6.50
January 1985	\$ 3.00-\$ 6.00	\$ 3.00-\$ 3.50	\$ 4.00-\$ 9.00
February	\$ 3.00-\$ 5.00	\$ 2.00-\$ 4.50	\$ 5.00-\$ 8.00
March	\$ 3.00-\$ 3.50	\$ 3.00-\$ 4.50	\$ 4.00-\$ 7.00
April	\$ 2.00-\$ 4.00	\$ 3.00-\$ 4.00	\$ 3.00-\$ 6.80
May	\$ 2.00-\$ 5.00	\$ 5.00-\$ 8.00	\$ 3.00-\$ 6.00
June	\$ 4.50-\$ 5.50	\$ 6.00-\$ 8.00	\$ 4.00-\$ 5.00
July	\$ 4.50-\$ 6.00	\$ 6.00-\$10.00	\$ 4.00-\$ 6.00
August	\$ 5.00-\$ 6.00	\$ 8.00-\$11.00	\$ 4.00-\$ 6.00
September	\$ 5.50-\$ 6.00	\$ 4.00-\$11.00	\$ 4.00-\$ 7.00

	<u>Spinach</u> per bnch of 6	<u>Spring Onions</u> per dozen bunch	<u>Tomatoes</u> per 4.5 kg
October 1984	\$ 4.00-\$ 7.50	\$ 4.50-\$ 5.00	\$15.00-\$26.00
November	\$ 3.00-\$ 4.50	\$ 4.50-\$ 5.00	\$15.00-\$19.00
December	\$ 5.00-\$ 6.50	\$ 4.50-\$ 5.00	\$ 7.00-\$14.00
January 1985	\$ 4.00-\$ 7.50	\$ 4.00-\$ 5.00	\$ 6.00-\$ 9.00
February	\$ 4.50-\$ 7.00	\$ 4.00-\$ 5.00	\$ 4.50-\$ 6.00
March	\$ 4.00-\$ 6.50	\$ 4.00-\$ 4.50	\$ 3.00-\$ 7.00
April	\$ 4.00-\$ 6.80	\$ 3.00-\$ 5.00	\$ 4.00-\$11.00
May	\$ 5.00-\$ 9.00	\$ 3.00-\$ 4.50	\$ 4.00-\$15.00
June	\$ 5.00-\$ 7.50	\$ 4.00-\$ 4.50	\$10.00-\$15.00
July	\$ 5.00-\$ 9.80	\$ 4.00-\$ 6.00	\$10.00-\$16.00
August	\$ 6.00-\$ 9.80	\$ 4.50-\$ 6.00	\$12.00-\$20.00
September	\$ 5.00-\$ 7.00	\$ 4.50-\$ 5.50	\$18.00-\$26.00

	<u>Yams</u> per 4 kg
October 1984	\$ 2.00-\$ 4.00
November	\$ 3.00-\$ 4.00
December	-
January 1985	-
February	-
March	-
April	-
May	\$ 6.00-\$15.00
June	\$ 8.00-\$12.50
July	\$ 8.00-\$10.00
August	\$ 8.50-\$12.00
September	\$10.00-\$12.00

1.13 SUNDRY INCOME

1.13.1 National Water and Soil Conservation Authority (NWASCA) Grants

These grants are of two types and the prime function of both is to provide protection to both water and soil and not to promote the growing of timber.

Protection Grants

These vary in the grant payment, depending on the size of the project:

1. Up to a maximum of 40 percent of the project cost is available as a grant for isolated projects.
2. Up to a maximum of 60 percent in grant payment may be paid for a farm scale project.
3. Up to a maximum of 70 percent may be paid as a grant if the project involves more than one property, i.e. there is a community of interest, and entire catchment is involved.

Windbreak Grants

Catchment boards provide grants to private landowners, with funds allocated by NWASCA who are responsible for approving this type of grant on a regional scale. These grants are only available in areas where the arable soils are classified as being prone to wind erosion. The grant payment is made at the rate of 60 percent of the project cost incurred.

Effects of Claims

Prior to the implementation of a scheme, catchment boards draw up an overall farm plan, and the landowner is required to sign a Land Improvement Agreement (LIA) which is usually registered against the land title. This agreement is considered necessary to protect the financial investment by the catchment board and to ensure that management performance levels, as laid out in the overall farm plan, are achieved.

Catchment boards levy an administrative service fee which is charged against the grant. Costs not covered by the grant are tax deductible.

These Grants are under review at the present time.

1.13.2 Refunds of Taxes on Fuels

Refunds of Petrol Tax

Motor Spirits Duty (i.e. Petrol Tax) may be refunded if the petrol was used:

- In vehicles licensed as E Class A or E Class B
- In vehicles subject to Road User Charges
- In unlicensed commercial vehicles such as forklifts, or tractors.
- In goods service vehicles (3.5 tonnes or under) used exclusively under a goods service licence.
- In commercial vessels or boats.
- In stationary engines eg. chainsaw, or used commercially for heating, lighting, cleaning etc.

Rate of refund is 8.9 cents per litre of petrol used, except for goods or passenger service vehicles, when the rate of refund is 2.5 cents per litre

Refund of Sales Tax on CNG and LPG

Sales tax on CNG and LPG is included in the purchase prices of the fuel. This sales tax may be refunded when the fuel is used:

- In vehicles over 3.5 tonnes which are subject to road user charges.
- In vehicles licensed as E Class A or E Class B.
- In unlicensed motor vehicles used commercially.
- For commercial purposes - not vehicles.

Rates of refund:

CNG - \$2.59 per gigajoule of CNG

LPG - 6.86 cents per litre of LPG

SECTION 2

FARM EXPENSES

NOTE: Prices quoted in this Section are **EXCLUSIVE** of **GST**
unless stated otherwise.

2.1 ANIMAL HEALTH EXPENSES

2.1.1 Dips, Sprays and Dressings

<u>Product</u>	<u>Unit Size</u>	<u>Retail Price</u>
<u>COOPERS</u>		
Bactas	500 g	\$ 42.37
Banmag	500 ml	\$ 14.06
Combat	5 litre	\$ 93.31
	10 litre	\$354.31
Combat Concentrate (75%)	5 litre	\$330.41
Combat 40%	10 litre	\$354.31
Diazotas 40%	10 litre	\$235.00
Grenade	2 litre	\$ 88.82
	5 litre	\$214.95
	20 litre	\$860.90
Trigon DFF	3 litre	\$231.62
	10 litre	\$700.52
Supreme DFF	3 litre	\$249.12
	10 litre	\$747.35
Decacide	2 litre	\$ 51.90
	5 litre	\$123.95
Warbex	1 litre	\$ 30.92
	5 litre	\$146.45
Wipeout	5 litre	\$156.25
	20 litre	\$625.00
Fly Strike Dressing	350 g	\$ 6.50
Flea Powder	100 g	\$ 1.80
Louse Powder	500 g	\$ 5.62
Louse & Fly Powder	450 g	\$ 2.38
Parasite Spray	50 ml	\$ 2.77
	5 litre	\$ 60.36
Footrot Aerosol		\$ 6.10
Taslin	500 ml	\$ 7.27
	5 litre	\$ 51.57
Dy-Fly Insecticidal Fly Bait	3 kg	\$ 46.86

VETCO PRODUCTS LIMITED

Copaderm - treatment of wounds and skin conditions	13.5g	\$ 8.63
Flea Ban 30 - Flea powder	110 g	\$ 5.94
Nuvan Top - Flea, lice tick spray		
	70 g	\$ 7.26
Padaid Paint - Foot probs, dogs	120 ml	\$ 7.15
Vetadine PVP Iodine Aerosol	150 g	\$ 8.78
Vet Nuvan - Flea, lice tick spray	170 g	\$ 6.83
Vioform Aerosol - Footrot, wounds	150 g	\$ 6.99

FARMERS FERTILISER LTD**Redene Diazinon 40**

10 litre \$184.00

5 litre \$ 95.30

DONAGHY**Footrot aerosol**

340 g \$ 8.15

Super Lube Veterinary Lubricant

2.5 kg \$ 92.50

1 litre \$ 3.75

Veterinary Iodine

100 g \$ 4.30

2.1.2 Sheep Drenching Guide

<u>Type of Animal</u>	<u>Weight Range</u>	<u>Dose Rate</u>	<u>Cents per dose*</u>
Lamb	Up to 20kg	4 ml	7.76
Lambs and Hoggets	21 - 30kg	6 ml	11.65
Hoggets	31 - 40kg	8 ml	15.54
Sheep	Over 41kg	10 ml	19.42
Rams		15 ml	29.13

* Depends on product and pack size

2.1.3 Cattle Drenching Guide

<u>Type of Animal</u>	<u>Weight Range</u>	<u>Dose Rate</u>	<u>Cents per dose*</u>
Cattle	up to 100 kg	20 ml	33.82
Cattle	100-200 kg	40 ml	67.63
Cattle	200-300 kg	60 ml	101.45
Cattle	over 300 kg	80 ml	135.26

* Depends on product and pack size

2.1.4 Anthelmintics Cost

<u>Product</u>	<u>Unit Size</u>	<u>Retail Price</u>
<u>COOPERS</u>		
Nilverm Oral front pack	1 litre	\$ 36.46
Nilverm Oral	5 litre	\$112.13
	12 litre	\$252.60
	24 litre	\$489.00
	45 litre	\$873.87
Nilverm Concentrate	6 x 625 ml	\$519.19
Nilverm Injection	500 ml	\$ 33.71
Nilverm Pig Wormer	200 g	\$ 14.95
	1 kg	\$ 58.00
	5 kg	\$268.75
	20 kg	\$912.50
Nilzan front pack	1 litre	\$ 39.80

Nilzan	5 litre	\$148.17
	12 litre	\$341.95
	20 litre	\$536.38
Panacur	1 litre	\$ 27.07
	5 litre	\$106.33
	25 litre	\$512.49
Panacur Ewe Strength	2.5 litre	\$160.24
Systemex	10 litre	\$253.88
	25 litre	\$580.45
Systemex Low Dose Cattle Drench	2.5 litre	\$236.36

MAY AND BAKER*

Nemafax Plus - sheep and	5 litre back pack	\$ 85.55
cattle	20 litre	\$ 289.00
	25 litre	\$ 352.00
Vermadex - sheep and goats		
liver fluke and		
worm drench	5 litre back pack	\$136.55
	20 litre	\$465.00
Trodax - injectable cattle		
liverfluke drench	250 ml	\$ 51.10
Nemafax Pig Wormer	1 kg	\$ 23.61

* Sole outlet for these products is VETERINARIAN ONLY; please note that actual prices operating at this time of publication were 40% below them.

MSD AGVET

Ivomec Liquid (Sheep)	5 litre	\$127.50
	20 litre	\$483.00
Ivomec Injection (Cattle)	200 ml	\$101.40
	500 ml	\$241.35
Ivomec Oral (For Cattle)	1 litre	\$175.40
Ivomec Injection (For Swine)	100 ml	\$ 53.25
Eqvalan Paste	1 syringe	\$ 10.40
Thibenzole (Sheep, Cattle and	20 litre	\$338.15
Facial Eczema)		
Ranide (Sheep and Cattle)	5 litre	\$ 84.55
	20 litre	\$275.41

FARMERS FERTILISER LIMITED

Mineralised Telmin RLT	5 litre	\$119.75
	20 litre	\$450.00
Telmin RLT	25 litre	\$502.00

BELL-BOOTH**Nutrimol**

5 litre

\$ 45.00

20 litre

\$165.00

2.1.5 Vaccines**Product****Unit Size****Retail Price****COOPERS**

Nilvax

500 ml

\$ 42.37

1000 ml

\$ 84.74

Multine 5

100 ml

\$ 8.97

200 ml

\$ 15.95

500 ml

\$ 35.88

Multine 4

200 ml

\$ 13.73

500 ml

\$ 30.91

Covax 5

200 ml

\$ 15.95

500 ml

\$ 35.88

Quad

200 ml

\$ 13.73

500 ml

\$ 30.91

Triple

200 ml

\$ 11.74

500 ml

\$ 26.67

PK Tet

200 ml

\$ 8.94

500 ml

\$ 20.31

BL-MO

200 ml

\$ 7.57

500 ml

\$ 17.22

PK

500 ml

\$ 12.32

PK Antitet

200 ml

\$ 22.54

500 ml

\$ 50.97

Scabine

150 dose

\$ 8.57

Gleptosil Injection (Iron
deficiency in piglets)

100 ml

\$ 29.00

MSD AGVET

5-In-One

100 ml

\$ 11.06

200 ml

\$ 18.39

500 ml

\$ 36.79

1000 ml

\$ 66.26

Thermo-Vac (6 x 500 ml)

\$209.59

Trip-Tet

100 ml

\$ 9.73

200 ml

\$ 16.13

500 ml

\$ 32.26

1000 ml

\$ 58.08

Thermo-Vac (6 x 500 ml)

\$183.60

Triple

200 ml

\$ 14.40

500 ml

\$ 28.73

PK-Tet

200 ml

\$ 10.80

BL-MO	500 ml	\$ 21.60
	100 ml	\$ 8.00
	200 ml	\$ 11.33
PK	500 ml	\$ 22.60
	100 ml	\$ 7.00
	200 ml	\$ 30.33
	500 ml	\$ 60.67
PK-ATS	1000 ml	\$109.20
	100 ml	\$ 18.20
	200 ml	\$ 30.33
	500 ml	\$ 60.67
	1000 ml	\$109.20
	Thermo-Vac (6 x 500 ml)	\$344.00
	Scabby Mouth 125 cc	\$ 5.30
	250 cc	\$ 9.35

Bl = Blackleg, MO = Malignant Oedema, T = Tetanus, PK = Pulpy Kidney, BD = Black Disease.

2.1.6 Antibiotics

	<u>Unit Size</u>	<u>Retail Price</u>
<u>MAY & BAKER*</u>		
Emtryl Premix - dysentery & scours in pigs & blackhead in poultry	10 kg	\$227.06
Emtryl Soluble - dysentery & scours in pigs & blackhead in poultry	500 g	\$ 49.66
Strinacin tablets - antidiarrhoeal	20 x 5 g	\$ 20.82
	200 x 5 g	\$173.32
Neostrinacin tablets - antidiarrhoeal	1 litre	\$ 15.09
	2 litre	\$ 27.98
	5 litre	\$ 66.10

* Sole outlet for these products is VETERINARIAN ONLY

<u>Farmers Fertiliser</u>		
Redene Zinc Sulphate (Footrot)	25 kg	\$ 36.75

2.1.7 Disinfectants

<u>Product</u>	<u>Unit Size</u>	<u>Retail Price</u>
<u>VECTO</u>		
Anisep	2 litre	\$ 12.87
	5 litre	\$ 29.20
<u>COOPERS</u>		
Formalin	20 litre	\$ 43.51
	200 litre	\$317.72

Savlon	5 litre	\$ 19.50
Hibitane MCC	5 litre	\$ 35.95
	25 litre	\$165.81
Hibitane MCC Plus	5 litre	\$ 42.24
	25 litre	\$192.47

FARMERS FERTILISER LIMITED

Syvel	5 litre	\$ 26.40
	20 litre	\$ 90.00
	200 litre	\$724.00
Pinol Antiseptic Deoderant	5 litre	\$ 18.30
	20 litre	\$ 60.00

2.1.8 Bloat Control

<u>Product</u>	<u>Unit Size</u>	<u>Retail Price</u>
<u>COOPERS</u>		
Bloateric 2 in 1	20 litre	\$148.36
Blogon	20 litre	\$144.25
Bloatbloc	15 kg	\$ 35.16
Bloatlick	1 litre	\$ 2.00

FARMERS FERTILISER LIMITED

Redene Bloataid Dual	5 litre	\$ 44.90
	20 litre	\$ 163.40
	60 litre	\$ 435.00
	200 litre	\$1330.00

KLENZADE

Bloatenz Two in One	20 litre	\$ 125.00
	200 litre	\$1070.00
Bloatenz plus	5 litre	\$ 34.50
	20 litre	\$ 133.00
	200 litre	\$1150.00

2.1.9 Dairy Ointments, Soaps and Teat Sprays

<u>Product</u>	<u>Unit Size</u>	<u>Retail Price</u>
<u>KLENZADE</u>		
Blu Gard	5 litre	\$ 36.00
	20 litre	\$ 123.00
	200 litre	\$1150.00
Teat Guard	5 litre	\$ 34.00
	20 litre	\$ 130.00

FARMERS FERTILISER LTD

Redene Teat Dip and Spray	5 litre	\$ 31.25
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	20 litre	\$ 121.40
	200 litre	\$1104.00
Redene Teatspray Plus	5 litre	\$ 44.20
	20 litre	\$ 171.80
	200 litre	\$1506.00
Redene Udder Cream	700 g	\$ 8.65
	4 kg	\$ 32.44
	8 kg	\$ 62.72

COOPERS

Hibitane Dairy Cream	3.5 kg	\$ 18.09
	17 kg	\$ 77.30

BELL-BOOTH

Ethamol Ointment	450 g	\$ 5.48
	1.7 kg	\$ 15.50
	8.5 kg	\$ 66.25
	17 kg	\$ 125.90

2.1.10 Dairy Shed Hygiene - Detergents and Sanatizers

COOPERS

Coldet	20 litre	\$ 33.14
Coldset	20 litre	\$ 90.11

FARMERS FERTILISER

Redene Iodophor Sanitiser	5 litre	\$ 25.90
	20 litre	\$ 91.60
	200 litre	\$ 800.00
Redene Lo-Count Acid	5 litre	\$ 24.25
	20 litre	\$ 93.00
	200 litre	\$ 812.00
Redene Lo-Count Alkali	4.5 kg	\$ 24.93
	10 kg	\$ 51.80
	20 kg	\$ 95.60
Redene Milkstone Remover	5 litre	\$ 23.60
	20 litre	\$ 90.40
Redene Milkstone Remover HAF	5 litre	\$ 33.25
	20 litre	\$ 129.00
Redene Non Ionic Rinse	5 litre	\$ 15.95
	20 litre	\$ 55.80
	200 litre	\$ 462.00

KLENZADE

Klenz Iodophor - sanitizer	5 litre	\$ 18.88
	20 litre	\$ 68.00
	200 litre	\$ 642.00

Iodovat - sanitizer and cleanser	5 litre	\$ 22.50
	20 litre	\$ 81.00
	200 litre	\$ 765.00
Q Klenz - sanitizer and cleanser	5 litre	\$ 20.97
	20 litre	\$ 75.50
	200 litre	\$ 665.00
Low Foam Q Klenz	5 litre	\$ 20.97
	20 litre	\$ 75.50
	200 litre	\$ 715.00
Klenz All Temp	5 litre	\$ 22.50
	20 litre	\$ 78.50
	200 litre	\$ 715.00
Klenzphos H.C.- milk stone remover	5 litre	\$ 25.83
	20 litre	\$ 93.00
	200 litre	\$ 870.00
Stainless Steel Detergent	5 kg	\$ 16.25
	20 kg	\$ 63.00
Tri Klenz - alkaline cleaner	20 litre	\$ 52.00
Kleer Klenz - alkaline cleaner	5 kg	\$ 19.50
	20 kg	\$ 67.00
Liquid Kleer Klenz	5 litre	\$ 17.00
	20 litre	\$ 60.00
Klenzaid Non-ionic Rinse	20 litre	\$ 42.00
	200 litre	\$ 360.00

NOTE: Klenzade (Economic Services Laboratory) have a refund on Returned Empty Containers in good condition:

20 litre - \$1.50

200 litre - \$30.00 (Plastic Drums only)

IVON WATKINS-DOW

Concentrated Mycorinse detergent	5 litre	\$ 19.15
	20 litre	\$ 73.20
	180 litre	\$ 610.20
Low Foam Mycosan dairy sanitizer	5 litre	\$ 23.50
	20 litre	\$ 89.60
	10 x 20 litre	\$ 884.00
Mycosan S dairy sanitizer	5 litre	\$ 23.50
	20 litre	\$ 89.60
	180 litre	\$ 748.80
Mycojet 3rd line dairy sanitizer	20 litre	\$ 90.00
Mycorinse detergent	5 litre	\$ 12.80
	20 litre	\$ 48.80
	180 litre	\$ 408.60

2.1.11 Metabolics

<u>Product</u>	<u>Unit Size</u>	<u>Retail Price</u>
<u>COOPERS</u>		
Boromag Plus	350 ml	\$ 3.27
	450 ml	\$ 5.23
Borophos	450 ml	\$ 9.12
Calcium Borogluconate	350 ml	\$ 2.89
	450 ml	\$ 4.68
Sulphamag	350 ml	\$ 2.21
Calcium Borogluconate 50%	100 ml	\$ 2.16
Ketol	1 litre	\$ 8.40
	2 litre	\$ 14.53
	5 litre	\$ 34.12
	20 litre	\$137.38

2.1.12 Animal Health Equipment

<u>Product</u>	
<u>BELL-BOOTH</u>	
Footrot Shears - Bell-Booth	\$ 33.80

<u>FARM-ACY</u>	
Footrot Shears - Arnolds	\$ 45.85
Cattle Trocar - Relieving Bloat	\$ 15.00

<u>COOPERS</u>		
Coopers Drench Gun	12.5 ml	\$ 63.14
Drench Back Pack	5.0 litre	\$ 17.88
P20 Drench Gun Auto	20.0 ml	\$ 91.66
P20 Injector Attachment	each	\$ 8.88
Needles 16 x 1/2 luer	100's	\$ 19.11
18 x 3/8 luer	dozen	\$ 4.16
18 x 3/8 record	dozen	\$ 4.16
Flutter Valve	each	\$ 1.95
Vaxigun 5ml Adustable	each	\$ 9.96
P74 Vaccinator Auto	5 ml	\$ 49.80

<u>MSD AGVET</u>		
MSD Sure Shot Drench Gun	15 ml	\$ 56.25
Sure Shot Back Pack	5 litre	\$ 12.75
Vaccinator auto (Adjustable)	5 ml	\$ 11.25

<u>DONAGHY</u>		
Cling Footrot Trough	8 feet	\$126.00
	10 feet	\$160.00
Burdizzo Footrot Shears		\$ 27.00

MAY AND BAKER

Lipiodol Injector - Sheep	1	ml	\$ 49.90
- Cattle	4	ml	\$ 83.16
Duometric Gun-injector/Drencher	15	ml	\$ 89.90

ALLFLEX

Allflex clipper for TB testing	5'	flex, elec	\$985.00
	10'	flex, elec	\$930.00

2.1.13 Veterinary Club Membership

Veterinary club charges are varied, depending on the club.

A typical membership fee would be \$25.00 to \$35.00.

Consultation	Minimum farm visit	\$ 16.50
	Routine work and consultation	\$ 45.00/hr
Ram Bleeding		\$ 3.00/hd
Ram Palpation	- visit free	\$ 0.55/hd
Cow Pregnancy Testing	- visit fee plus	\$ 1.10/hd
Additional plate		\$ 16.00
Anaesthetic Initial Dog	- IV	\$ 17.00
	- Gas	\$ 25.00
Surgical Fee (Applies to Farm work)		\$ 90.00/hr
Dog castration		\$ 60.00
Dog spey		\$100 - \$130.00/hr
Extra fee for vaccination on above		\$ 12.00
Dog Vaccination, normal annual routine		\$ 22.00
Deer TB and Velveting	\$66/hr, plus 30c/head, plus equipment	

2.2 FEED AND NUTRITION COSTS

2.2.1 Cattle

NRM FEEDS LTD.

<u>Product</u>	<u>Price per tonne - bulk</u>	<u>Price per bag in tonne</u>	<u>ex store</u>
Earlywean Calf Crums	\$307.20	\$14.19	\$15.09
Hi Energy Dairy Pellets	\$250.80	\$11.93	\$12.83
Hi Protein Dairy Pellets	\$272.70	\$12.81	\$13.71
Pedigree Cattle Products	\$270.30	\$12.71	\$13.61

D.H. BROWN AND SON LIMITED

	<u>Pack Size</u>	<u>Tonne Rate \$ Bulk</u>	<u>GST</u>	<u>Per pack \$</u>
Calf Growa	40 kg	345.00	34.50	379.50
Dairy Ration/Crumble	30 kg	278.00	27.80	305.80
Beef Finisher	40 kg	285.50	28.00	313.50
Dairy Meal (Sacks)	30 kg	261.19	26.12	287.31
Barley Meal	40 kg	315.00	31.50	346.50

Dairy Companies

Dairy Meal	30 kg	246.50	24.65	271.15
Dairy Crumble	30 kg	246.50	24.65	271.15
Dairy Ration	30 kg	246.50	24.65	271.15
Calf Growa	40 kg	336.00	33.60	369.60

MAY & BAKER

Supreme Calf	2 kg			21.33
	5 kg			44.96
	10 kg			85.00

2.2.2 Sheep

NRM FEEDS LTD.

<u>Product</u>	<u>Price/bag in tonne</u>	<u>Price/bag ex store</u>
Sheep Pellets	\$12.39	\$13.29
Hi Protein Sheep	\$14.38	\$15.28

D.H. BROWN AND SON LIMITED

	<u>Pack Size</u>	<u>Tonne Rate \$ Bulk</u>	<u>GST</u>	<u>Per pack \$</u>
Sheep Nuts	40 kg	282.97	28.30	311.27
Hogget Grower Nuts	40 kg	282.97	28.30	311.27

2.2.3 Pigs

NRM FEEDS LTD.

<u>Product</u>	<u>Price per tonne - bulk</u>	<u>Price per Bag in tonne</u>	<u>ex store</u>
Pig Creep Crums	\$542.80	\$23.61	\$24.51
Weaner Care Meal	\$475.50	\$20.92	\$21.82
Weaner Care Pellets	\$483.50	\$21.24	\$21.14
Flexiwean Meal	\$438.40	\$19.44	\$20.34
Flexiwean Pellets	\$446.40	\$19.75	\$20.65
GrowerCare Meal	\$387.50	\$17.40	\$18.30
GrowerCare Pellets	\$395.50	\$17.72	\$18.62
Rapid Grow Meal	\$355.20	\$16.11	\$17.01
Rapid Grow Pellets	\$362.20	\$16.43	\$17.33
Early Finisher Meal	\$321.60	\$14.76	\$15.66
Early Finisher Pellets	\$329.60	\$15.08	\$15.98
Econo Bacon Meal	\$302.10	\$13.98	\$14.88
Econo Bacon Pellets	\$310.10	\$14.30	\$15.20
Pig Breeder Meal	\$303.50	\$14.04	\$14.94
Pig Breeder Pellets	\$311.50	\$14.36	\$15.26
Weaner Superblend	\$939.70	\$39.49	\$40.39
Grower Concentrate	\$869.80	\$36.69	\$37.59
Breeder Superblend	\$625.10	\$26.90	\$27.80

D.H. BROWN AND SON LIMITED

	<u>Pack Size</u>	<u>Tonne Rate \$ Bulk</u>	<u>GST</u>	<u>Per pack \$</u>
Piglet Starter Crumb.	40 kg	520.50	52.05	572.55
Weena Growa Pellets	40 kg	391.94	39.19	431.13
Porker Pellets	40 kg	355.50	35.55	391.05
Baconer Pellets	40 kg	325.31	32.53	357.84
Fortified Pig Nuts	40 kg	325.23	32.53	357.84
Pig Supplement Meal	40 kg	720.80	72.08	792.88

COOPERS

<u>Product</u>	<u>Units Size</u>	<u>Retail Price</u>
Hi-Breed Sow Premix	25 kg (10 x 2.5 kg)	\$185.31
Hi-Breed Sow Premix	25 kg	\$179.06
Pig Breeder	25 kg (10 x 2.5 kg)	\$118.75
	25 kg	\$112.50
Pig Creep	25 kg (5 x 5.0 kg)	\$108.12
Pig Creep and Dynamutilin	25 kg (5 x 5.0 kg)	\$222.80
Pig Grower/Finisher	25 kg (10 x 2.5 kg)	\$131.50
	25 kg	\$118.92
Pig Standard	25 kg (10 x 2.5 kg)	\$ 86.56
	25 kg	\$ 80.31
Sow Conditioner	25 kg	\$ 43.00
Hi-Energy Fat Premix	25 kg	\$ 37.50

Dynamutlin Feed Premix	2 kg	\$435.00
Boost	1 litre	\$ 32.50

2.2.4 Deer

NRM FEEDS LTD.

Deer Pellets	\$270.30/tonne bulk	\$12.71/bag in tonne lots
	\$ 13.61/bag ex store	

D.H. BROWN AND SON LIMITED

Deer Nuts (40 kg)	(\$310.00 plus \$31.00 GST)	\$341.00
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2.2.5 Goats

NRM FEEDS LTD.

Goat Pellets	\$12.79/bag in tonne	\$13.69/bag ex store
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2.2.6 Horses

NRM FEEDS LTD.

<u>Product</u>	<u>Price/bag in tonne</u>	<u>Price /bag ex store</u>
Stud Horse	\$13.50	\$14.40
Horse and Pony	\$12.32	\$13.22
Racehorse Pellets	\$12.64	\$13.64

D.H. BROWN AND SON LIMITED

Horse Pellets 40 kg	(\$333.50 plus \$33.85 GST)	\$366.85
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2.2.7 Rabbits

NRM FEEDS LTD.

Rabbit Pellets	\$18.70/bag in tonne	\$19.60/bag ex store
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D.H. BROWN AND SON LIMITED

Ration No. 1 (40 kg)	(\$345.00 plus 34.50 GST)	\$379.50
Ration No. 1 (10 kg)	(\$315.25 plus 31.53 GST)	\$346.78

2.2.8 Dogs

D.H. BROWN AND SON LIMITED

Top Dog Nuts	(10 kg)	\$ 6.09
Doggies	(30 kg)	\$27.09

2.2.9 Poultry

NRM FEEDS LIMITED

<u>Product</u>	<u>Price per tonne - bulk</u>	<u>Price per bag in tonne</u>	<u>ex store</u>
Chick Mash	\$395.60	\$17.72	\$18.62
Chick Crums	\$403.60	\$18.04	\$18.94
Pullet Grower Mash	\$279.40	\$13.08	\$13.98
Pullet Grower Pellets	\$287.40	\$13.40	\$14.30
Pre Lay Mash	\$288.60		
Hi Lay Mash	\$313.10	\$14.42	\$15.32
Hi Lay Pellets	\$321.10	\$14.74	\$15.64
Hi Lay Super Mash	\$326.80	\$14.97	
Hi Lay Super Pellets	\$334.80	\$14.29	
Hi Lay Supreme Mash	\$337.70	\$15.41	

D.H. BROWN AND SON LIMITED

	<u>Pack Size</u>	<u>Tonne Rate \$ Bulk</u>	<u>GST</u>	<u>Per pack \$</u>
Chick Feeds				
Chick Mash	40 kg	361.82	36.18	398.00
Chick Pex	40 kg	363.02	36.30	399.32
Growers Feeds				
Grower Mash	40 kg	295.00	29.50	324.50
Grower Pex/Pellets	40 kg	296.20	29.62	325.82
Layer Feeds				
H.E. Layer Mash	40 kg	340.00	34.00	374.00
H.E. Layer Pex/Pellets	40 kg	341.20	34.12	375.32
Layer Mash	40 kg	330.00	33.00	363.00
Layer Pex/Pellets	40 kg	331.20	33.12	364.32
Hi Grain Feeds				
Starter Crumbles plus Coccidiostat	40 kg	512.00	51.20	563.20
Finisher Crumbles No 1 plus Coccidiostat	40 kg	478.00	47.80	525.80
Finisher Crumbles No 2 plus Coccidiostat	40 kg	448.00	44.80	492.80
Finisher Crumbles No 3	40 kg	440.00	44.00	484.00
Turkey Feeds				
Pre-Starter	40 kg	575.00	57.50	632.50
Starter Crumbles	40 kg	545.00	54.50	599.80
Grower Pellets	40 kg	470.00	47.00	517.00
Finisher Pelles	40 kg	436.00	43.60	479.60

Developer Pellets	40 kg	335.00	33.50	368.50
Breeder Pellets	40 kg	345.00	34.50	379.50
Male Breeder Pellets	40 kg	361.82	36.18	398.00

COOPERS

<u>Product</u>	<u>Unit Size</u>	<u>Retail Price</u>
Chick Starter	25 kg (5 x 5 kg)	\$78.56
Poultry Layer	25 kg (10 x 2.5 kg)	\$95.58
	25 kg	\$86.21
Poultry Grower	25 kg (10 x 2.5 kg)	\$93.87

2.2.10 Nutritional Supplements

BELL-BOOTH

<u>Product</u>	<u>Unit Size</u>	<u>Retail Price</u>
Molasses	28 kg	\$ 27.50
	250 kg	\$142.80
Summit Salt Block	Magnesium	\$ 15.00
	Copper Cattle	\$ 12.97
	Copper Sheep	\$ 12.73
	Multi-Mineral	\$ 13.24
	Just Salt	\$ 12.62
Agricultural Salt	Undried	\$ 220/tonne
	Dried	\$ 20/tonne

2.2.11 Mineral and Vitamin Supplements

<u>Product</u>	<u>Unit Size</u>	<u>Retail Price</u>
Vitamin Supplements		
<u>MAY & BAKER*</u>		
Hydrovit - liq Vit A, D & E	1 litre	\$ 47.25
	5 litre	\$200.75

* Sole outlet for these products is VETERINARIAN ONLY

Trace Elements

BELL-BOOTH

Chelate calcium	1 kg	\$ 17.24
Chelate copper	1 kg	\$ 29.18
Chelate Iron	1 kg	\$ 19.55
Chelate Magnesium	1 kg	\$ 16.75
Chelate Manganese	1 kg	\$ 16.75
Chelate Zinc	1 kg	\$ 15.57
Agssel selenium pelletys	25 kg (N.I.)	\$ 62.50
	25 kg (S.I.)	\$ 65.00
Agssel	10 kg (N.I.)	\$ 27.50
	10 kg (S.I.)	\$ 28.60

Vitagran Seaweed Products	7 kg	\$ 20.20
	25 kg	\$ 44.45

MSD AGVET

Copper injection	20 tubes	\$ 7.60
	40 tubes	\$ 12.60
	250 tubes	\$ 59.33

MAY & BAKER*

Mineral Premix - liquid Cu, Zn, Co + Se	1 litre	\$ 27.50
	5 litre	\$430.00

* Sole outlet for this product is VETERINARIAN ONLY

Pig Supplements

COOPERS

Ascorbic Acid	10 kg	\$280.60
Sol Min Pig	20 kg	\$ 64.17
Tas Sel	25 kg	\$ 33.44
Vitamin E50	2 kg	\$ 90.36
Vitamin K	1 kg	\$ 9.03
Vitamin A, B2 and D3	25 kg	\$ 68.16
Lysine	25 kg	\$207.00

VETCO PRODUCTS LIMITED

Roscoral - Oral Fe suspension - piglets	100 ml	\$ 15.32
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Horse Supplements

COOPERS

Hi E plus Selenium	1 kg	\$ 31.75
Ephocal	2.5 kg	\$ 16.93
	10 kg	\$ 43.75
Horse Supp plus Selenium	1 kg	\$ 16.52
	2.5 kg	\$ 30.41
	10 kg	\$101.96
Tasvite Plus	2 litre	\$ 15.06
	5 litre	\$ 37.81

VETCO PRODUCTS LIMITED

Blud - Vit B, Cu, Cl, Biotin, Amino acids and Iron supplement	30 x 28.4 kg	\$ 61.00
Calphos for Horses - Calcium supplement	500 g	\$ 11.83
Feramo H - Vitamin/Mineral supplement	2.5 kg	\$ 30.01
	9 kg	\$100.63
	18 kg	\$183.03
Ironcyclen Liquid - Iron tonic	1 litre	\$ 16.19
	4.5 litre	\$ 48.48

25	litre	\$214.66
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Cattle Supplements

COOPERS

Tasmix Calf Supplement

2.5	kg	\$ 23.37
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5	kg	\$ 31.56
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10	kg	\$ 83.87
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Fitch Supplement

COOPERS

Fitch Supplement

5	kg	\$ 31.56
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2.2.12 Grazing Fees

Payment for grazing varies according to the class and age of livestock, the time of year, seasonal conditions and the district.

Current rates are approximately 15c-50c/head/week for sheep, and \$1.50-\$4.00/head/week for cattle.

2.3 STOCK MANAGEMENT

2.3.1 Mating Management Aids

<u>Product</u>	<u>Unit Size</u>	<u>Retail Price</u>
<u>BELL BOOTH</u>		
Ram Harness - Leather		\$21.24
- Nylon		\$26.37
Ram Harness Crayons	each	\$ 3.73

ALLFLEX

Chinball Mating Harness		\$64.50
Chinball Mating Harness fluid	1 litre	\$16.25
Chinball Mating Harness fluid	2 litre	\$27.50

DONAGHY'S

Stafix Ram Harness		\$18.90
Ram Crayon Clips		\$ 1.10
Stafix Ram Crayons - Soft or Hard		\$ 2.76
Stafix Goat Harness		\$22.45

2.3.2 Productivity Improvers

COOPERS

Ralgro (Beef)	240 dose	\$ 688.85
(Including 2 Implanters)	960 dose	\$2810.00
Multilamb	12 x 100 ml	\$ 900.00
Ralgro Implanter		\$ 64.73
Ralgro Needles	3's	\$ 5.87

2.3.3 Lambing, Calving and Kidding Requisites

DONAGHY

Staydry Lamb Cover	100/box	\$ 22.00
Maskit Aerosol - mothering on spray	340 g	\$ 5.10
Bearing Retainers	3/pack	\$ 10.50
Veltite Sheep Straps	6/pack	\$ 10.92
Animal Resuscitator - Lamb		\$ 22.31
- Pig		\$ 17.41
- Calf/Foal		\$118.81
Kea Crooks - Short leg		\$ 18.50
- Long leg		\$ 20.20
- Combination (neck and leg)		\$ 22.33
Ewe Tethering Pegs		\$ 7.50
Ewe Peg Strap		\$ 3.30
10 litre plastic bucket		\$ 2.50

ALLFLEX

Farm-Acy Lamb Recording note book		\$ 2.85
Progeny Card	each	\$ 0.25
Shepherds lambing belt		\$ 35.70
Bearing Retainers	5/pack	\$ 7.50
Animac Minute 300mm New Born kids, lambs		\$ 4.65
Animac Mini 400mm Newly shorn kids, hoggets		\$ 5.95
Animac Small 500mm Smaller goats		\$ 6.25
Animac Medium 650mm Medium size goats, hoggets		\$ 7.65
Animac Large 800mm Large Saanens, adult sheep		\$ 8.45
Animac Buck High quality Canvas - Heavy Duty Velcro Fastener		\$ 35.00
Shepherds Crooks - long neck and leg		\$ 13.25
- short leg		\$ 11.50

BELL-BOOTH GROUP

Calfeteria 15 teat model		\$164.06
Calfeteria teats old style		\$ 2.99
Calfeteria teats new style		\$ 2.99
Calfeteria valves		\$ 1.70
Calfeteria tubing 20m coil		\$ 25.70
Buckets	14 litre	\$ 18.15
	23 litre	\$ 20.33
Pig drinking nipple - Alumask		\$ 8.44
Lambdry cover standard	roll	\$ 24.30
Lambdry covers twin marked	roll	\$ 54.95
Sheep/Goat covers	each	\$ 8.17
Lamb teats		\$ 1.53

2.3.4 Tailing and Marking Requisites

ALLFLEX

Earmarers (Rim cuts)	- sheep	\$56.75 - \$ 91.00
	- cattle	\$71.75 - \$106.00
Punchholes	- sheep	\$66.75 - \$ 81.75
	- cattle	\$81.75 - \$ 97.50
Castration and Tailing Rings		\$9.00
Quarter Tips	- sheep	\$66.75 - \$ 78.75
	- cattle	\$81.75 - \$ 93.75
Sheep and Goat Daroux Emasculator		\$82.50

HURRICANE

Low Cost Docking Pens 2.45m x 2.45 m	100 lambs	\$290.83
Pipe Dock Pen, Pen Size 3.6 m x 2.45 m		
Double sided		\$457.00
Single sided		\$411.50
3.66 m Panel		\$ 67.00
2.45 m Panel		\$ 54.50

HAYES

Cradle - Stevlyon Lamb	\$ 66.78
Cradle Stevlyon Lamb-Multi	\$490.63
Cradle-Searing Board	\$ 5.85
Cradle-Twin Mounting Bracket	\$ 30.72

CYCLONE

Complete pen with single sided race	\$358.46
Complete pen with double sided race	\$444.65
Extra plain panel	\$ 52.35
Extra panel with drafting gate	\$ 77.10
Extra race gate	\$ 21.45

2.3.5 Raddles and Markers

VETCO PRODUCTS LTD

Top Mark - Aerosol spray	170 g	\$ 3.85
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ALLFLEX

Sure Spray Aerosol	170 g	\$ 3.70
	500 g	\$ 6.66

DONAGHY

Sprayline Aerosol Marker	170 g	\$ 3.85
	400 g	\$ 6.55
Brightline Stick Raddle	20/box	\$17.50

2.3.6 Stock Identification

Eartags

ALLFLEX PLASTIC

"Special stamped" orders are 4 or more combinations of numbers and letters, double-row stampings, property names, brand, symbols, codes or logos etc., and incur a charge of \$18.50 with a minimum order of 25.

<u>Product</u>	<u>Blank</u>	<u>Numbered</u>	<u>Lettered</u>
Small male	21c	26c	21c
Small female	17c		
Sheep male	17c	22c	24c

female	14c	19c	21c
Medium male	27c	36c	
female	24c	33c	
Hog female	24c	34c	
Large male	36c	47c	
Large female	33c	44c	
Maxi female	45c	56c	
Neck tag	75c	85c (1 side)	
		95c (2 side)	
Farm-acy Brass Tag	17c	17c	25c
Farm-acy Nickel Tag	27c	27c	35c
Farm-acy Thrifty Beef tag			\$ 0.42
Ankle straps - Caution			\$ 3.20
- Dry Cow			\$ 3.20
Retractable Applicator			\$49.00
Total Tagger			\$19.95
Retractable Applicator Spare Pin			\$ 3.00
Broad Tip Tag Pen (Black only)			\$ 3.95
Fine Tip Tag Pen (Black only)			\$ 3.95
Standard and Total Tagger Applicator			\$ 1.95
Spare pins			\$ 1.50
Total Tagger Jaw Inserts			\$ 1.50
Farm-acy Tag Punch			\$25.50
Farm-acy Closing Pliers			\$13.90

TALBOT PLASTICS LTD.

Ritchey Ear Tags

Sheep	- Blank	32c
	- Printing	add 16c
	- Tail	add 11c
Cattle	- Bland	50c
	- Printing	add 16c
	- Tail	add 11c
Marking Fluid	per bottle	\$ 2.00

Brands and Tattoos

ALLFLEX

Tattoo forceps		\$ 35.00
Individual letters and figures		\$ 5.55
Sets of figures 0-9		\$ 56.00
Alphabet A-Z		\$145.00
Year figures		\$ 10.75
Tattoo Ink	- green paste	\$ 5.25
	- black roll-on	\$ 5.85
5 letter tattoo set	- Cattle size (12 mm)	\$144.00
	- Sheep and Goat (10 mm)	\$144.00

2.3.7 De-horning

ALLFLEX

Farm-acy calf dehorners	\$ 32.00
Farm-acy yearling dehorners	\$186.00

2.3.8 Scales

HAYES

Cattle Weighing platform	1000 kg	\$ 875.00
	1500 kg	\$1220.00
Cattle weigh pltfm with 3pt Link	1000kg	\$1040.00
Sheep Weighing platform (squeeze)	- swing gate	\$ 903.00
	- drop gate	\$ 941.00
Sheep/Pig Weighing platform	- crate	\$ 892.00
	- bare	\$ 682.00
Hayes Weigher Handler		\$ 979.00
Hayes Handler - Sheep		\$ 930.00
Hayes Handler - Goat Conversion Kit		\$ 80.50

ALLFLEX

Weighbands - Cattle and pigs LW & DW (girth tape)	\$ 17.25
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DONALDS

Sheep and Pig Hydraulic Draftmaster 100	\$1088.00
Draftmaster 100 with wheels and handles	\$1157.00
Cattle weighing platform 1000 kg	\$1400.00
Cattle weighing platform 1500 kg	\$1570.00
Model 1000 Hopper weigher	\$1480.00
Model 1500 Hopper weigher	\$1590.00
Rubber mats - model 1000 cattle weigher	\$ 108.00
Rubber mats - model 1500 cattle weigher	\$ 108.00
Transport wheels and handles	- Cattlemaster \$ 89.00
	- Draftmaster \$ 89.00
Column support	\$ 38.90

AGRISALES (Wrightsons-Dalgety)

Note: Prices include GST

Cattle Scale	- 2 x Loadbar and Indicator	\$3419.90
	- 2 x Loadbar, Indicator and Memory	\$3725.70
Sheep/Goat crate with Indicator		\$3547.50
	with Indicator and Memory	\$3854.40
Printer		\$ 924.00
Cattle Platform		\$ 476.30
Small Animal Crate		\$1466.30

2.3.9 Animal Crushes

DONALDS

Squeeze Cattle Crush (sliding gate walk-thru head bail)	\$2565.00
Sliding Gate	\$ 250.00
Head Bail Automatic Walk-through	\$ 796.00
Head Bail Gate Type	\$ 472.00
Baulk gate	\$ 138.00

AGRISALES

Note: Prices include GST

Junior Head Bail	North Island	\$385.00
	South Island	\$416.35
Squeeze Head Bail	North Island	\$825.00
	South Island	\$919.32

HAYES

Cattle Head Bail	\$440.29
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2.3.10 Dog Registration and Hydatid Control Fees

These vary depending on the Local Body involved. However a typical fee would be \$22.00 per dog or bitch over 3 months of age.

2.3.11 Kennels, Shelters, Motels

MCALPINES

Note: Prices include GST

3 Bay ply Baa-Tel	\$490.00
A Frame Dog Kennel with front	\$ 66.00
Single Dog Motel (Plywood)	\$ 68.20
Large Single Dog Motel (Plywood)	\$105.00
3 Berth Dog Motel (Plywood)	\$242.00

2.3.12 Chains, Collars, Rings, Leads

HAYES

Dog Chains - 9 gauge link	\$ 9.14
- 12 gauge link	\$ 7.55

DONAGHY

Dog chain - Truck Chain	500mm x 3.8 mm	\$ 3.10
- Double Swivel	2 m x 3.8 mm	\$ 12.00
- Standard	2 m x 3.8 mm	\$ 9.50
	2 m x 5.0 mm	\$ 12.50
Dog Collar - Greasy Chrome		\$ 5.65
Pig Ring	1 1/4" x 3 1/16"	\$ 5.70

ALLFLEX

Bull Leads	- Pincer type with rope	\$ 13.50
Rope Halters	- Terylene	\$ 12.25
Bull Ring	2.5"	\$ 11.02
	2.75"	\$ 11.83
	3"	\$ 12.63

BELL-BOOTH

Calf-halter	- tether	\$ 20.52
	- leading	\$ 21.52
Calf leads	- leather	\$ 10.14
	- nylon	\$ 7.18
Calf collars		\$ 17.44
Dog chains	1.37 m	\$ 4.94
	2.3 m	\$ 10.09
Dog chains	- Tug 1.83 m	\$ 8.37
Dog collar	- Leather	\$ 6.72
	- Pup	\$ 4.82

2.3.13 Whistles, Knives, Steels**DONAGHY**

Plastic Shepherd's Whistle	\$ 0.65
Hi-Tone Shepherd's Whistle (Metal)	\$ 0.70
PN1 Pocket Knife, single blade	\$ 4.84
Self Locking Pocket Knife	\$ 9.23
Falcon Knife, wooden handle, stainless steel blade	
11 cm Small Skinning knife - Plain handle	\$ 7.62
15 cm Large Skinning knife - Grip handle	\$ 10.82
Steels - R S1 6" Rabbits Steel	\$ 5.63
- Small Shepherd Set	\$ 30.00
- Large Shepherd Set	\$ 34.72

BELL-BOOTH

Pocket knife	- 1904	\$ 7.78
	- 904	\$ 5.78
	- Mercator	\$ 13.07

2.4 BREEDING EXPENSES

2.4.1 Artificial Breeding Fee (Canterbury)

Premier Sires

First 100 Cows	\$6.00/cow semen + \$4.37/insem. service fee
Second 100 Cows	\$6.00/cow semen + \$3.39/insem. service fee
Third 100 Cows	\$6.00/cow semen + \$2.79/insem. service fee
Thereafter	\$6.00/cow semen + \$1.76/insem. service fee

Nominated Service

Semen price range from \$6.00 - \$30.00

Service Fee:	First	100 cows \$4.37/insemination
	Second	100 cows \$3.49/insemination
	Third	100 cows \$2.79/insemination
	Fourth	100 cows \$2.23/insemination
	Thereafter	100 cows \$1.76/insemination

Can also have:

Special-Pak (SP)	- \$6.70/dose
Easier - Calving Bull	- \$6.50/dose or listed price

D.I.Y. Service with Frozen Semen:

No charge for packing and despatch for nominated or other frozen semen option if order received 30 days prior to delivery.

Late orders - \$15 per dispatch plus freight and nitrogen

Ex store - \$15 per dispatch plus freight and nitrogen at cost

A complete AB kit is available for \$130.00

Training: Artificial Insemination Training is available to farmers on a restricted basis at a cost of \$200 plus accomodation.

Beef Pak - \$3.00/dose

2.4.2 Herd Testing Charges (Canterbury)

Standard Testing (Sampling Officer Present During Milking)

	Visitation Fee		Per Cow
Monthly option	\$150.00	plus	\$12.93 per cow
Alt monthly opt.	\$ 80.00	plus	\$ 8.79 per cow
Production ranking opt.	\$ 30.00	plus	\$ 5.13 per cow
Milk records option	\$ 30.00	plus	\$ 4.40 per cow
Triple test	\$ 50.00	plus	\$ 5.95 per cow

Self Sampling Testing:

Monthly Option	\$150.00	plus	\$10.41 per cow
Alt monthly opt.	\$ 80.00	plus	\$ 7.20 per cow

Triple test	\$ 50.00	plus	\$ 4.70 per cow
Production ranking test	\$ 30.00	plus	\$ 4.00 per cow

Somatic Cell Counting:

Only available in conjunction with milkfat testing, additional cost per cow is \$1.70

Includes a National Levy of 2 cents per cow towards mastitis research.

2.4.3 Herd Recording Services

\$100 per herd plus 10c/cow in the herd

2.4.4 Sheep Plan

\$1.30 per ewe on list)

plus \$60.00 flock fee) Covers all options

2.4.5 Sire Replacement

Rams

The following figures are the approximate values for flock rams.

Dorset Down	\$250
South Dorset Down	\$150-200
South Suffolk	\$250
Suffolk	\$250
Romney	\$250
Corriedale	\$100-200
Perendale	\$100-250
Border Leicester	\$200-250
Borderdale	\$150-250
Coopworth	\$200-300

These values are only useful as guide for budgeting purposes. Up to date figures should be obtained wherever possible.

Bulls

Beef bulls vary much in price depending on qualities desired, age etc. Normally in the range of \$1500 to \$5000.

Stags

The average price for breeding stags at present seems to be in the region of \$5500 for red deer. The range would be from \$1500 for younger animals up to \$15 to 20,000 for imported or Wapiti cross stags from proven studs.

Bucks

Pure bred Angora Average paid in December 1986 for mature stock range from \$600 to \$4000 depending very much on the blood lines and desired features.

Cashmere - \$150 to \$800.

2.5 DAIRY SHED EQUIPMENT

ALFA-LAVAL

Note: Prices include GST

Cup Removers	\$544
Diagnostic Recorder	\$2860

Herringbone Milking Machines (Pulsation System Only)

	<u>HP 102</u>	<u>EP 100</u>
Highline 10 Unit	\$3828.00	\$ 5203.00
14 Unit	\$5269.00	\$ 7150.00
18 Unit	\$6710.00	\$ 9086.00
20 Unit	\$7436.00	\$10065.00
24 Unit	\$8877.00	\$12298.00

Complete with rubberware and milking equipment

Liners and shells	\$4.45
Oil Recirculating Mufflers	\$ 654
Pasture Probe	\$1375
Recirculating Washing System	\$ 42
Round Yard Gate Drives	\$ 869
Teat Sprayers	\$ 629
Vacuum Pumps - Masport Major	\$1001
- Masport Master	\$1122
- Masport Super	\$1386

ALLFLEX

Allflex multi-spray	\$140.00
Allflex mastitis detector	\$ 12.35
Allflex Teat Dip Cup	\$ 19.50
Allflex Automated Teat Sprayer	\$572.00

KLENZADE

Carlyle Bloatenz Dispenser	\$323.00
Seal kit	\$ 17.95
Klenzade Liquid Dispenser Model 330	\$308.00
Seal kit	\$ 17.95

D.MCL. WALLACE

2 Cow Mini Milker	complete with Wheels	\$1856.00
4 Cow Mini Milker	Complete with Wheels	\$2682.00
2 Goat Mini Milker	complete with Wheels	\$2556.00
4 Goat Mini Milker	complete with Wheels	\$2682.00
Top Milk Quarter Milker-New		\$ 42.18
Quarter Milker Assembly		\$ 45.53

Hard Black Polythene Bucket	14 litre	\$ 14.39
	23 litre	\$ 24.83
Teat Cup Remover (Less Timer)		\$ 178.41
complete with Timer		\$ 240.11
Teat Cup Remover Timer		\$ 76.72
TCR Initiator - complete		\$ 129.98
Plastic Milk Claw		\$ 200.95
Teat Cup (without weight)		\$ 5.25
Teat Cup weight		\$ 6.14
Teat Cup Liner		\$ 4.15
Pulsator Bridge		\$ 3.68
Pulsator Lid		\$ 8.30
Pulsator Lid Tube		\$ 2.88
Pulsator Guide		\$ 4.56
Pulsator Body Single Part		\$ 11.31
Pulsator Bracket 1.50"		\$ 15.74
Westafalia Teat Cup Washer		\$ 80.40
Westafalia Claw Bowl		\$ 43.48
Westafalia Cup Case		\$ 21.02
Westafalia Liner, 23mm	set of 4	\$ 22.50
Jet Spray 19mm Jetspray Nozzle		\$ 19.60
Teat wash Nozzle		\$ 4.28
Vacuplus Pulsator		\$ 260.23
Wallace Auto Shut-off Claw		\$ 137.50
Wallace Sight Claw		\$ 130.68
Wallace "Auto Claw" Bowl		\$ 35.67
A/claw Shut off Seal		\$ 2.64
Master Type "M" Pulsator		\$ 73.34
Relay Type "R" Pulsator		\$ 80.23
Pulsator Mounting Clamp	32/38 mm	\$ 13.51
MK II Pulsator Conversion Kit		\$ 37.57
Automatic Type A MK 2 Pulsator		\$ 144.41
"A" cluster Washer c/w clamp		\$ 52.33
Washer Unit		\$ 81.82
MK II Mastitis Detector		\$ 112.27
Waikato/Ruakura Regulator		\$ 45.80
Vacuum Regulator		\$ 75.85
Vacuplus Regulator Standard		\$ 168.44
Westfalia Vac Pump Set		\$ 2727.27
LR100 Vacuum Pump		\$ 812.50
1.50" Rod Mount Clamp S/Steel		\$ 17.68
1.50" Milk Line Nozzle LH 5/8		\$ 20.88
Milkline Filter (with by-pass)		\$ 15.66
1.50" Vacuum Guage Fitting		\$ 10.80
Relay Line Support	- 38 mm	\$ 6.25
Vacuum Guage Adaptor	- 38 mm	\$ 7.25
TCR Nipple Adaptor	- 38 mm	\$ 7.25

MK 3 Milk Meter Complete		\$ 218.18
LR-VAC Water Fed Port Plate		\$ 167.81
Wallace Stainless Steel Filter	4" x 24"	\$ 307.98
13" x 30" Blank Can Only-No Port		\$ 384.91
13" x 2" Receiving Can Complete		\$ 370.00
Clamping Ring for Receiving Can		\$ 105.19
9" Plain Diaphragm		\$ 19.77
Dairy Heater Element		\$ 34.09
Dairy Heater Cooler	200 litre	\$ 869.92
MCG Single Bank Cooler		\$ 547.73
MM 200/200 Double Bank Cooler		\$1131.60

2.6 SHEARING SHED EXPENSES

2.6.1 Plant

Machines:

GALLAGHER (1986 prices)

P.T.O. drive shearing drive	- with no flexible drive	\$ 417.00
	- with 1 flexible drive	\$ 502.00
	- with 2 flexible drives	\$ 587.00

AGRISALES

Note: Prices include GST

Sunbeam S.G.V. 1, Electric Plant Complete		\$1194.00
S.G.V. 3, Electric Plant Complete		\$1194.00
Farm model with rigid downtube,	single speed	\$ 772.00
	dual speed	\$ 916.30
Farm model with flexible downtube,	single speed	\$ 694.65
	dual speed	\$ 838.00
Sunbeam portable petrol dagging plant		\$ 770.50
Lister Golden Electric	- Single phase	\$1060.00
	- Three phase	\$1060.00
Lister Vertical Electric Plant	- Rigid tube	\$ 747.00
	- Flex Tube, In/out	\$ 520.00
Lister 2 Speed Shearing Plant	- Flex Tube, In/Out	\$ 788.00
	- Rigid Down Tube	\$ 955.00
Lister Goat Shear Conversion Kit		\$ 195.00
Lister Electric Dagging Plant	- Flex. Tube In/Out	\$ 650.00
Tas Motorised Dagging Plant	- Flex. Tube In/Out	\$ 592.00
Tas Motorised Dagging Plant	- Standard Flex Tube	\$ 580.00

Electric Grinders and Accessories:

AGRISALES

Sunbeam Double	- 1 phase	\$1320.00
	- 3 phase	\$1433.20
Portable Steel Grinder Table		\$ 103.13
Emery Paper	- Fine	\$ 5.42
	- Coarse	\$ 5.98
Emery Rubber Adhesive - 230 ml		\$ 7.48

2.6.2 Gear and Accessories

AGRI-SALES

Supergrip		\$ 432.50
Lister Lo-Volt Clippers		\$ 399.00
Clipping Plates	- Lister Vacuum	\$ 48.78
	- Lister Electric	\$ 48.78
Combs	- Top Flight	\$ 25.25
	- Merino	\$ 18.75

Cutters	- XL	\$ 4.95
	- Colt Narrow	\$ 4.88
	- Cover Comb	\$ 34.05
	- Goat Comb	\$ 35.75

Clipmaster		\$ 462.00
Sunbeam Animal Clipper		\$ 145.20
SGV Adapter for Shearing Goats		\$ 199.38

2.6.3 Woolpresses

DONALDS

No Tramp Hydraulic	- Std Model, 2 hp single phase	\$4880.00
	Maxi Model, 2 hp single phase	\$5366.00
	Maxi Model, 3 hp single phase	\$5785.00
Manual	- Hoist brake, safety brake for top box	\$ 87.00
	- Sandow Vertical Hoist Model HSW steel	\$1755.00
Woolpress conversion kits:		
	Sandow model A (tipover) or B (swing top)	\$ 550.00
	Sandow model A5 - vert hoist (w/out wheels)	\$ 550.00
	Sandow model A5 (with wheels) vertical hoist	\$ 520.00
	Sandow tipover hoist conv (steel or wood)	\$ 305.00
	No Tramp conversion kit (Standard-maxi)	\$ 830.00
	Digital Indicator Woolpress unit: - No Tramp	\$1892.00
	- HSW and Vertical	\$1892.00

2.6.4 Wool Tables

HAYES Stevlyon circular wool table	\$ 413.25
CYCLONE Wool Table	\$ 280.00
DONALDS Circular wool table	\$ 375.00

2.6.5 Wool Pack Holders

CYCLONE

On Skids	\$ 57.19
On 2 Shepherd Castors	\$ 86.46
On 4 Shepherd Castors	\$ 112.16
On legs	\$ 55.20
Cyclone Wool Bin Partitions	\$ 88.00
Mobile Fleece Bin	\$ 248.00

DONALDSWool bin

\$ 262.00

2.6.6 Fleece Weighers**DONALDS**Fleece weigher

10 kg

\$ 149.00

15 kg

\$ 180.00

ALLFLEXFleece way

- Scales, Cradle, Tag Sorter, 2 trays

\$ 156.00

- Scales, Cradle, Tag sorter, 4 trays

\$ 168.00

- Tag Sorter box

\$ 19.30

- Trays each

\$ 9.50

Talli tags, fleece Weight recording,

1 to 1000

\$ 135.00

AGRISALESFleece tray

\$ 173.80

2.6.7 Wool bale trolleys

HAYES - Stevelyon

\$ 289.49

2.6.8 Woolroom Expenses**Sweeps:****ALLFLEX**

- Swivel sweep

\$ 21.00

- Hi sweep

\$ 15.85

- Lamb Bats

\$ 23.00

- Wide sweep

\$ 20.25

Counters:**BELL-BOOTH**

- Tally Counter

\$ 14.76

WRIGHTSON

- Electronic Sheep Counter (GST Incl.)

\$330.00

Stencils:**ALLFLEX**

- Circular 3 letter stencil

\$ 36.00

- Circular 3 letter stencil A-Z

\$ 24.50

- Circular figure 0-9

\$ 19.50

- 3 letter stencils

\$ 21.50

- Stencil Brushes

\$ 7.00

Aerosol Sprays:**FARM-ACY**

- Aerosol sprays - Stendye \$ 6.35

DONAGHYS

- Multi Mark Multi Purpose Aerosol \$ 6.05

Hooks:**HAYES**

\$ 8.00

Seaming Twine:

per hank \$ 6.43

Packs:

- Poly each \$ 6.27

- Jute each \$ 10.80

2.7 FREIGHT AND CARTAGE

2.7.1 Railway Transport Rates

Charges are now based on the greater of actual or dimensional weight. Dimensional weight is calculated by using the cubic conversion factors below:

Intra-island: 5m^3 to 1 tonne or 333 kg to 1m^3

Inter-island: 2.5m^3 to 1 tonne or 400 kg to 1m^3

Tables of freight prices are available from Railfreight offices. As an example part of the Christchurch table is as follows:

	1-25 kg \$/kg	251-500 kg \$/kg	Then Add	Over 1000 kg \$/kg	Then Add
<u>Prices to North Island</u>			\$ c		\$ c
Auckland	0.81	0.28	33.50	0.22	68.50
Gisborne	1.04	0.36	41.50	0.28	91.50
Masterton	0.69	0.24	26.00	0.19	56.00
New Plymouth	0.90	0.31	36.00	0.25	71.00
Tauranga	1.08	0.37	44.25	0.29	56.00
Wellington	0.49	0.17	18.50	0.13	43.50
Whangarei	1.10	0.38	44.50	0.30	94.50

Minimum Charge Per Consignment : \$9.50

Prices to South Island

Alexandra	0.77	0.19	27.25	0.15	47.25
Ashburton	0.30	0.05	10.50	0.04	15.50
Dunedin	0.56	0.13	21.50	0.12	31.50
Greymouth	0.52	0.12	20.75	0.10	30.75
Invercargill	0.73	0.18	24.25	0.14	49.25
Nelson	0.57	0.14	20.25	0.11	35.25
Timaru	0.30	0.07	10.00	0.05	20.00

Minimum Charge Per Consignment : \$6.50

2.7.2 Country Services Railfreight Prices

<u>Zone</u>	1-25 kg \$/kg	251-500 kg \$/kg	Then add \$ c	Over 1000 kg \$/kg	Then add \$ c
A	FREE				
B	\$0.005 per kilogram: Minimum charge \$1.00				
C	\$0.01 per kilogram: Minimum charge \$2.00				
D	0.30	0.03	7.75	0.02	12.75
E	0.30	0.05	10.50	0.04	15.50
F	0.30	0.06	9.25	0.04	24.25
G	0.30	0.07	10.00	0.05	20.00
H	0.30	0.07	10.00	0.06	15.00
I	0.40	0.08	13.25	0.06	28.25
J	0.40	0.09	13.00	0.07	23.00
K	0.42	0.10	15.50	0.08	25.50
L	0.47	0.11	17.50	0.09	27.50

Minimum Charge per Consignment: \$6.50

Selected examples from the freight schedule are given below.
For more information refer to nearest Railfreight office.

<u>Zone</u>	<u>Between</u>		
D	Hamilton Christchurch	and and	Morrinsville Rangiora
E	Hamilton Christchurch	and and	Paeroa Darfield
F	Hamilton Christchurch	and and	Te Kauwhata Rakaia
G	Hamilton Invercargill	and and	Pukekohe Queenstown
H	Hamilton Westport	and and	Piopio Murchison
I	Hamilton Blenheim	and and	Whangamata Kaikoura
J	Auckland Christchurch	and and	Coromandel Otira

K	Auckland Blenheim	and and	Dargaville Cheviot
L	Invercargill	and	Arrowtown

2.7.3 Road Transport Rates

Road Freight rates are normally dependent on both type of goods and distance to be carted.

The following figures are for the Canterbury area - in other areas the rates may differ slightly. Rates are available on application to the local branch of the New Zealand Contractors Federation (Incorporated).

Rates are as at May 1986. (\$ per unit)

	10	30	40	<u>km</u> 50	60	70	80
General Goods	14.21	23.49	27.71	31.44	34.81	37.82	40.27
Bagged Lime & Fertiliser	13.36	22.06	25.82	29.18	32.31	34.82	37.24
Bulk Lime & Fertiliser	10.24	18.61	22.06	25.12	27.82	30.33	37.70
Wool	3.40	5.16	5.93	6.68	7.40	8.05	8.52
Metal	13.71	20.17	26.26	-	-	-	-
Bulk Grain per tonne	10.19	17.17	20.50	23.28	25.63	28.04	30.03
Boxes over 1000 kg per tonne	13.29	19.71	22.41	24.76	26.94	28.92	30.85
Boxes under 1000 kg per tonne	16.91	23.26	26.03	28.41	30.59	32.57	34.46
Empty Boxes per tonne	3.84	4.63	5.02	5.42	5.82	6.22	6.57

Fat lambs to works

Fat lambs to works

<u>km</u>	<u>"A"</u> <u>\$</u>	<u>"B"</u> <u>\$</u>
10	49.60	54.90
20	65.10	72.00
30	81.10	89.70
40	96.60	106.70
50	111.20	123.00
60	124.80	137.80
70	138.20	152.80
80	151.50	167.40
90	164.40	181.70
100	176.40	195.00
110	187.90	207.80
120	198.00	218.90
130	206.90	228.70
140	216.10	238.90
150	225.20	249.00
160	232.00	256.00

Qualification for "A" and "B" rates for fat stock to Freezing Works

Qualification for "A" rate:

1. Freight paid by the Freezing Company, and
2. Tallies to be given to carrier day before cartage, and
3. Stock to be ready for loading, and
4. Acceptable loading facilities available, and
5. A minimum pick-up of 100 (variable by districts)

"B" Rate applies if any one element is not met.

Store Stock

	10	30	50	$\frac{\text{km}}{70}$	100	130	160
Store lambs	0.483	0.797	1.060	1.320	1.641	1.890	2.115
Fat lambs	0.523	0.855	1.170	1.450	1.857	2.178	2.447
Hoggets 0.584	0.960	1.300	1.622	2.052	2.408	2.707	
Store sheep	0.646	1.060	1.440	1.791	2.253	2.635	2.975
Fat sheep	0.722	1.190	1.640	2.050	2.601	3.086	3.459
Weaners	2.76	4.930	6.710	8.300	10.61	12.16	13.36
Fat Vealers 18 month	4.33	7.51	10.69	12.94	15.64	17.75	19.41
Store steers 2 yr cattle	5.15	8.98	12.14	15.20	19.16	21.75	23.98
Store cows							
In calf cows							
Fat cattle	5.55	10.09	14.06	17.73	21.98	25.01	27.14

2.7.4 Air Rates

AIR NEW ZEALAND

Rates are quoted ex Christchurch

Freight Air:	Christchurch to Wellington	\$0.71/kg
	Minimum charge	\$3.50
	Christchurch to Auckland	\$1.19/kg
	Minimum charge	\$3.50

Jet-ex rates:		
(Overnight)	Christchurch to Wellington	\$1.16/kg
	Christchurch to Auckland	\$1.95/kg
	Minimum charge	\$4.50

International

	<u>Min Charge</u>	<u>Normal</u>	45 kg	100 kg	250 kg	500 kg	1000 kg
	<u>\$/kg</u>	<u>\$/kg</u>	<u>\$/kg</u>	<u>\$/kg</u>	<u>\$/kg</u>	<u>\$/kg</u>	<u>\$/kg</u>
To Sydney, Melbourne, Brisbane, Hobart	48.00	4.02		3.19 2.40	1.54	1.54	
- Foodstuff							
- Floral/Bulb			1.99				
To Perth	48.00	7.23		4.32	3.24	2.97	
- Foodstuff					2.69	2.37	
- Floral/Bulb			4.75				
To Adelaide	48.00	4.32		3.49	2.71		
To Singapore		41.00	10.32	7.74			
- Foodstuff				2.56		2.30	2.17
- Floral				3.06			
To Hong Kong		48.00	13.12	9.86			
- Foodstuff				2.68	2.55		
- Floral				3.50			

2.7.5 Cartage Rates

Hourly Rates:

Capacity <u>tonnes</u>	Trucks <u>\$ c</u>	Trailers <u>\$ c</u>
Up to 5	29.69	10.12
Up to 6	32.27	10.99
Up to 7	34.11	11.50
Up to 8	34.94	11.86
Up to 10	39.28	13.13

Distance Rates:

Capacity <u>tonnes</u>	Truck per km <u>cents</u>	Trailers per km <u>cents</u>
Up to 5	164.4	39.7
Up to 6	169.6	45.0
Up to 7	176.5	48.4
Up to 8	187.0	51.9
Up to 10	202.5	69.2

Time and Distance Rates:

Capacity <u>tonnes</u>	Trucks	Per hr \$ c	Trailers	
	<u>Per km</u> cents		<u>Per km</u> cents	<u>Per hr</u> \$ c
Up to 5	65.8	24.62	19.00	9.78
Up to 6	81.3	25.71	22.50	10.02
Up to 7	91.7	26.62	25.90	10.12
Up to 8	95.2	27.18	29.40	10.32
Up to 10	107.8	29.18	45.00	10.87

2.8 SEEDS

2.8.1 Wheat

Cost of seed per tonne for Certified 2nd Generation as at late December 1986. All prices are inclusive of seed treating (Baytan) and include GST.

<u>Cultivar</u>	<u>Price</u>
Rongotea	\$748.00
Arawa	\$693.00
Advantage	\$748.00
Karamu	\$715.00
Otane	\$803.00
Weka	\$786.50
Kotare	\$785.40
Crossbow	\$715.00
Oroua	\$748.00
Bounty	\$714.45
Abele	\$715.00

2.8.2 Barley

Cost of seed per tonne for Certified 2nd Generation. Prices inclusive of seed treating (Baytan) and GST.

<u>Cultivar</u>	<u>Price</u>
Triumph	\$645.50
Fleet	\$654.50
Magnum	\$613.80
Goldmarker	\$613.80
Liberty	\$583.00
Kym	\$627.00
Hassan	\$627.00
Tipper	\$627.00
Illia	\$621.50
Koru	\$627.00

2.8.3 Oats

Omihi, Mapua, Amuri, Caravelle, Anvil, Taiko /tonne	\$495.00
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2.8.4 Lupins

Uniwhite, Uniharvest	\$500/tonne
Bitter blue, Borre	\$550/tonne

2.8.5 Ryecorn

Rahu MD Certified	\$550/tonne
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2.8.6 Maize

Various hybrids (treated)

\$680/tonne

2.8.7 Peas

Field

Whero

\$654.00/tonne

Blue Rondos

\$616.00/tonne

White Rondos

\$616.00/tonne

Marrowfat

\$616.00/tonne

Garden

General Freezer variety

\$561.00/tonne

Orthocide treating

plus \$49.50/tonne

Apron treating

plus \$220/tonne

2.8.8 Small Seeds

The following can only be a rough guide as the small seeds market is extremely variable, with almost daily fluctuations in prices. All prices are per kilogram of certified seed and GST inclusive.

Rape:

Rangi

\$ 1.54

Swedes:

\$ 5.00

Turnips:

\$ 5.00

Kale:

Medium stemmed varieties

\$ 5.50

Giant stemmed varieties

\$ 3.43

Lucerne: (certified)

WL 318 certified - bare seed

\$13.09

Oranga certified - bare seed

\$ 8.95

Wairau

\$ 6.85

Ryegrass:

Ruanui

\$ 2.48

Nui

\$ 2.48

Ariki

\$ 2.06

Manawa

\$ 1.25

Paroa

\$ 1.25

Tama

\$ 1.79

Concord

\$ 2.53

Moata

\$ 1.79

Cocksfoot:

Apanui	\$ 2.70
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Prairie Grass:

Matua 2nd generation	\$ 2.74
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Lawngrass:

Browntop	\$ 8.50
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Highlight Fescue	\$ 7.20
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Bushburn:

40 kg bag	\$105.00
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Maku Lotus:

	\$25.50
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Yorkshire Fog:

2nd generation	\$ 7.70
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Clovers:

Pitau	\$ 3.96
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Pawera Red Clover	\$10.35
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Hamua	\$ 4.67
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Turoa	\$ 6.60
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Huia	\$ 4.00
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2.8.9 Seed Coating

	<u>Seed/coat ratio</u>	<u>\$/kg</u>
Ryegrass	1:1	1.27
Lucerne	1:0.25	3.02
Red, White and Sub. Clover	1:1.75	1.70
Dogtail, Timothy	1:1	1.57

2.8.10 Vegetable Seeds

Vegetable seeds vary quite markedly in price depending on cultivar and quantity ordered. The following are estimates only.

Artichoke:

Green globe	\$170.00/kg
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Asparagus:

Mary Washington	\$ 65.00/kg
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Beans:

Broad - Exhibition Long Pod	\$ 3.00/kg
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Butter - Golden Wax	\$ 6.00/kg
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Dwarf	\$5.00 to \$7.00/kg
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Runner	\$4.50 to \$10.00/kg
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Beet:	\$20.00 to \$45.00/kg
Broccoli Hybrid:	\$725.00 to \$800.00/kg
Cabbage:	\$500.00 to \$800.00/kg
Carrot:	\$55.00 to \$90.00/kg
Cauliflower:	\$135.00 to \$800.00/kg
Celery:	\$325.00 to \$425.00/kg
Cress:	\$36 per kg
Cucumber:	
Hybrids	\$120.00/kg
Early cultivars	\$640.00/kg
Egg Plant:	\$45.00to \$1000/kg
Endive:	\$40.00/kg
Leek:	\$45.00 to \$190.00/kg
Lettuce:	\$120.00 to \$200.00/kg
Marrow:	\$50.00 to \$150.00/kg
Onion:	\$65.00 to \$130.00/kg
Parsley:	\$55.00 to \$180.00/kg
Parsnip:	\$40.00 to \$85.00/kg
Pea:	\$3.00/kg
Pumpkin:	\$55.00 to \$80.00/kg
Radish:	\$20.00 to \$50.00/kg
Rhubarb:	\$65.00 to \$80.00/kg
Rockmelon:	\$1500.00 to \$2100.00/kg
Silver Beet:	\$18.00 to \$22.00/kg
Spinach:	\$18.00 to \$42.00/kg

Squash:	\$55.00 to \$310.00/kg
Swedes:	\$15.00/kg
Sweetcorn:	\$15.00 to \$30.00/kg
Tomato:	\$130.00/kg
Turnip:	\$17.00/kg
Improved Hybrids	\$300.00/kg
Watermelon:	\$60.00/kg
Improved Hybrids	\$500.00/kg

2.8.11 Flower Seeds:

NOTE: There can be a wide range in cost of flower seeds, depending on the variety of seed.

Carnations	\$ 24 - \$ 35 per g
Freesia	\$ 54 per 100 g
Aster	\$ 10 - \$45 /100 g
Chrysanthemum	\$160 per 100 g
Dahlia	\$ 20 - \$80 /100 g
Geranium	\$ 20 /100 seeds
Gerbera	\$190 per 100 g
Gysophyla	\$ 5 - \$220/100 g
Lobelia	\$ 70 - \$125/100 g
Marigold	\$ 10 - \$800/100 g
Polyanthus	\$ 42 - \$100 /5 g
Sweet Pea	\$ 7 - \$16 /100 g
Wallflower	\$ 15 - \$40 /100 g
Zinnia	\$ 8 - 160 /100 g

2.8.12 Bulbs (per 100)

Daffodils	\$35.00 to \$100.00
Hyacinths	\$85.00 to \$100.00
Tulips	\$55.00 to \$ 65.00
Anenomes	\$ 6.00 to \$ 20.00
Crocuses	\$25.00 to \$ 40.00
Freesias	\$20.00 to \$ 35.00
Nerines	\$70.00 to \$240.00

2.9 CASH CROPPING EXPENSES

2.9.1 Sacks

Sack sizes are designated in centimetres.

Sizes are unchanged from imperial.

Prices are new (ex store).

A 48 inch, 3 stripe sack is now 122 cm, cost \$3.97.

A 46 inch standard sack is now 116 cm, cost \$2.91.

A 37 inch sack is now 94 cm and costs \$2.41.

N.B. A bale holds 250-300 sacks.

The sacks containing seed bought by the farmer would be used for the seconds off the header and for storing seed held onto by the farmer for future sowings so discount them in working out a budget.

2.9.2 Box Hire

Box capacities are as follows:

Peas	1.3 tonne
Ryegrass	700 to 800 kg
Clover	1.0 tonne

Hire varies markedly between companies but on average would be in the region of \$7.00.

2.9.3 Seed Certification Fees

Entry Fee Crops requiring	One field inspection	\$34.53
	Two field inspections	\$42.88
	Three field inspections	\$51.23

Plus travelling 78c/km nearest MAF to Farm,

Note: All fees include GST

2.9.4 Seed Testing Fees

As from 1/1/87 testing charges per line including sampling charge will be approximately \$90.00 per test.

2.9.5 Herbage Seed Levy

This levy is imposed on herbage seed collected by the M.A.F. seed testing station on all lines of herbage seed submitted for first testing.

The following are the Herbage Seed Subsection levies as at 13 August 1986.

	<u>Cultivar</u>	<u>(Cents/kg of seed)</u>
Red Clover	Grasslands Hunua	0.87
	Grasslands Turoa	0.87
	Grasslands Pawera	1.75
White Clover	Grasslands Huia	0.62
	Grasslands Pitau	0.62
	Permanent pasture	0.62
Cocksfoot	Grasslands Apanui	0.45
	Grasslands Wana	0.62
Crested Dogstail		0.75
Lotus	Grasslands Maku	3.00
Prairie Grass	Grasslands Matua	0.50
Ryegrass	Grasslands Paroa	0.18
	Grasslands Tama	0.18
	Grasslands Ruanui	0.30
	Grasslands Nui	0.30
	Permanent pasture	0.30
	Ellett	0.30
	Grasslands Ariki	0.30
	Grasslands Manawa	0.18
Timothy	Grasslands Kahu	1.00
Browntop		1.25
Yorkshire Fog		1.25
Lucerne	Grasslands Oranga	1.25
Phalaris	Grasslands Maru	1.25
Tall Fescue	Grasslands Roa	1.25
Yarrow		1.25
Chewings Fescue		0.75

2.9.6 Wheat Growers Levies

Compulsory Insurance Scheme	82.5c per \$100 value
Economic Research	13.0c per \$100 value
Administration of the Wheat Growers Subsection	10.0c per \$100 value
Federated Farmers	30c per tonne of wheat sold

2.9.7 Potato Levy

The Potato Growers Federation has a compulsory levy of 0.25% of the value of potatoes.

2.9.8 Consolidated Dressing and Store Handling Charges

These rates include receiving, delivering, sampling weighing, dressing, brushing of sacks and disposal of offal.

Ryegrasses - Ruanui, Tama, Manawa, Ariki, Paroa and Nui	12.00 cents per kg
Cocksfoot	31.00 cents per kg
Clovers - White, Red and Alsike	29.50 cents per kg
Lucerne	29.50 cents per kg
Grass seed (Fine - Browntop, Fescue, Dogstail and Timothy)	33.00 cents per kg
Turnips, Chou Moellier, Kale & Mustard	30.00 cents per kg
Rape	21.50 cents per kg
Prairie Grass	49.00 cents per kg
Yarrow	65.00 cents per kg
Separating White clover and Ryegrass	\$2.00 per sack
Separating mixed oats and Ryegrass	\$2.00 per sack
Slurry treating - Captan	\$45.00 per tonne
- Bayton	\$143.50 per tonne
- Vitaflow 200	\$88.00 per tonne
Blending clovers and blending grass seeds	\$3.00 on machine OR \$1.00 on mixer/sack
Wheat and Rye-corn	\$43.00 per tonne
Barley	\$50.00 per tonne
Field Peas and Lupins	\$50.00 per tonne
Garden Peas and Beans	\$60.00 per tonne
Oats (dressing and clipping)	\$60.00 per tonne
Linseed	\$89.00 per tonne

Farmers usually only get their small seeds dressed and under ordinary circumstances seed goes once through the dressing machines.

Field dressed ryegrasses, clovers and timothy usually dress out approximately 25 percent offal and field dressed cocksfoot from 25 to 33 percent offal.

2.9.9 Grain and Seed Drying Charges

Peas	to 17% moisture	\$25 per tonne
	17-18% moisture	\$30 per tonne
	over 18% moisture	\$35 per tonne
	second time over	half rates
Wheat, Oats and Barley	to 17% moisture	\$23 per tonne
	17-18% moisture	\$28 per tonne
	over 18% moisture	\$31 per tonne
	second time over	half rates
Small Seeds	to 17% moisture	10 cents per kg
	17-18% moisture	11 cents per kg
	over 18% moisture	13 cents per kg

2.9.10 Weighing Charge

\$3 per truck; or \$7 per articulated vehicle

2.10 BEES

Hives:

Complete	each	\$ 84.90
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Hive Mats:

Hardboard with Wood Rim	each	\$ 3.62
	per 10	\$ 30.19
	per 100	\$274.41
Hardboard only	each	\$ 1.58
	per 10	\$ 13.19
	per 100	\$119.89

Frames only	each	\$ 1.37
	per 10	\$ 10.82
	per 100	\$ 96.02

Hive Strappers:

Complete with Strapping	each	\$ 7.60
	per 10	\$ 72.20
Without strapping	each	\$ 5.95
	per 10	\$ 56.55
Extra strapping	per length	\$ 0.98
	per coil	\$ 3.47

Hive tools:

Kelley 10in	each	\$ 8.64
Kelley type 10in Chromium plated	each	\$ 5.92
Maxant 10in with hook	each	\$ 15.40

Roofs:

Without iron	each	\$ 8.97
	per 10	\$ 84.71
With iron	each	\$ 12.73
	per 10	\$121.36
Iron only	each	\$ 3.76
	per 10	\$ 36.65

Frames:

Hoffman Full Depth, Three Quarter Depth, Half Depth, Section Frames		
Full and Half Depth, Manley Three Quarter Depth	10	\$ 9.32
	100	\$ 67.41
100 per Bulk Carton	1000	\$616.30

Bee Escapes:

Porter Double Ended, plastic	each	\$ 1.37
	per 10	\$ 13.02
New, Round Galvanised type	each	\$ 1.75
	per 10	\$ 16.63
	per 50	\$ 78.75

Bee Escape Boards:

(1 Porter Bee Escape mounted in H/Bd with wooden rim)	each	\$ 5.52
	per 10	\$ 48.46

(1 Round Galvanised Bee Escape mounted in H/Bd with wooden rim)	each	\$ 5.85
	per 10	\$ 51.55

Extra Wood Frames for Bee Escape Boards	each	\$ 1.37
	per 10	\$ 10.82
	per 100	\$ 96.02

Bottom Boards - Reversible:

(10 in package)	each	\$ 7.77
	per 10	\$ 72.71

Excluders:

All Wire with Wood Frames		
1-9	each	\$ 9.15
10-49	each	\$ 8.00
50 and over	each	\$ 7.63

Unassembled Excluders - 50 and over only	each	\$ 7.43
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Extra Wood Frames as above	each	\$ 1.23
	per 10	\$ 10.06
	per 100	\$ 89.07

Feeders:

Division Board	each	\$ 5.52
	per 10	\$ 46.95

Entrance Type	each	\$ 2.16
	per 10	\$ 19.69

Pollen Traps:	each	\$ 33.50
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Queens:

Depending on number required and time of year: \$6.00 to \$8.50 each.

Nucleus Stock:

\$40.00 plus freight

Package Bees:

1 to 8	\$ 24.00
9 or more	\$ 21.00

Honey Extractors:

4 frame non reversible with Stainless Steel Can

each \$382.00

Honey Gates:

Cast Iron-Thread

2in

each \$ 52.36

2 1/2 inch

each \$ 59.37

Nylon-Threaded with back nuts

1 1/4 inch

each \$ 10.96

1 1/2 inch

each \$ 14.90

1 3/4 inch

each \$ 21.70

Honey Pumps:

'Ecroyds' Gear type 1.25 inch

each \$300.00

Honey Strainers:

28 mesh Nybolt for use with 20 litre Polypail

each \$ 10.15

Honey Refractometers:

\$249.00

Honey Tanks:

Plastic 60 litre (90 kg), 1 to 1.75 inch nylon honey gate

\$ 74.60

Uncapping Knives:

Electric

\$125.00

Plain 10 inch

\$ 29.20

Steam heated 10 inch

\$ 56.20

Veils:

Folding wire guage

- standard

\$ 6.15

- woodman

\$ 6.60

Round with plastic nest

\$ 9.40

Bee hoods

- long sleeved

\$ 43.20

Gloves:

Leather, ventilated	pair	\$ 35.25
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Separator:

7	\$ 1.81
100	\$ 19.40

Honey Cartons:

500 g square clear plastic polyjars 0 to 5 wraps	\$15.85/wrap
with white screw caps 6 or more wraps	\$14.90/wrap

2 kg plastic pot with clipon	lids per carton (200)	.50 each
	less than 1 carton	.60 each

30 kg (20 litre) plastic poly pails	each	\$ 9.10
with lids	per 10	\$ 85.00

Comb Foundation

	Sheets per kg approx	Kg per carton	Carton Lots	Less than Carton lots	100 sheets Cartons (approx)
Medium Brood	17.50	12.5	11.04	11.93	66.24 (6 kg)
Seven sheet special	15.50	13.5	10.90	11.77	
Extra Heavy Brood	13.25	16	10.73	11.59	
Medium Brood					
3/4 Depth	23	12.5	11.04	11.93	
Thin Super 1/2 Depth					
Standard	57-61	13.5	12.98	14.02	
Thin Super 1/2 Depth					
Full Length	53-57	15	12.98	14.02	
Thin Super-Full					
Depth, Full Lgth	26.5	16	11.71	12.65	

Comb Foundation Converted

	Standard Carton Lots	Less than Carton Lots	
Medium Brood	1.76	2.12	
Seven Sheet Special	1.62	1.94	
Extra Heavy Brood	1.45	1.73	
Medium Brood 3/4 Depth	1.76	2.12	Plus \$1.50 handling charge
Thin Super-1/2 Depth	3.74	4.49	
Thin Super-1/2 Depth			
Full Length	3.74	4.49	
Thin Super-Full Depth			
Full Length	2.45	2.93	

Embedders:

Hand - spur type	each	\$ 8.05
Electric transformer c/with leads		\$ 63.65

Fumidil B:

0.5 g bottle	each	\$ 11.64
9.5 g bottle	each	\$133.23

Hats:

Ventilated Bee Helmets	- woven fabric	\$ 20.12
	- moulded plastic	\$ 22.80

Smokers:

3 inch galvanised	each	\$ 20.85
4 inch galvanised with shield	each	\$ 23.70
3 inch stainless steel	each	\$ 28.30
4 inch stainless steel with shield	each	\$ 31.60

P.D.B. (Paradichlorbenzene):

1 kg container	each	\$ 5.85
2 kg tin	each	\$ 13.35
Bulk plus container	per kg	\$ 5.05

Queen Rearing Materials:

Plastic Cell Cups - Kenco	each	\$ 0.14
	per 100	\$ 10.25
Bozi Cell Cup bars	each	\$ 0.15
	per 200	\$ 24.00
Bozi Cell Cup bars	each	\$ 1.20

Nursery frame with 20 cages		\$ 50.95
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Bee Brushes:

Single sided		\$ 9.75
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Wasp Killers:

100ml bottles		\$ 5.95
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2.11 HORTICULTURE

2.11.1 Fruit and Nut Trees

Fruit Trees:

Apple		\$ 7.60
Pear		\$ 7.60
Plum		\$ 8.25
Peach		\$ 8.25
Apricot		\$ 8.50
Cherry		\$ 8.75
Nectarines		\$ 8.25

Nut Trees:

Almond		\$18.50
Walnuts		
Nigra	2yr - \$4.75 each	\$45.00/10
	3yr - \$6.00 each	\$52.00/10
Regia	2yr - \$5.75 each	\$45.00/10
	3yr - \$7.50 each	

Citrus Fruits:

Lemons (from N.I.)	\$16.50
Tangelos	\$16.50
Mandarins	\$16.50
Grapefruit	\$16.50
Oranges	\$16.50

Subtropicals:

Tamarillo (yellow)	\$ 5.40
Kiwifruit	\$11.05
Black passionfruit	\$ 4.20

2.11.2 Fruit Plants

Berryfruit:

Strawberry Runners	\$ 2.10/10
Raspberry (plants)	\$ 0.95/cane
Brambles - Black satin (thornless)	\$ 0.95/cane
- Thorn free	\$ 0.95/cane
Boysenberry	\$ 0.95/cane
Blackcurrant (plants)	\$ 3.75
Redcurrants	\$ 3.75
Gooseberries	\$ 4.75

2.11.3 Greenhouses and Growing Tunnels

BROWNBUILT

Tunnel House	1.8m x 8.0m 4 bay kitset	\$ 7210.00
Stdnd Arch Greenhouse	6.0m x 10.0m 3 bay kitset	\$ 9400.00
9m Gable Greenhouse	4.9m x 9.0m 3 bay (vented)	\$19700.00
12m Gable Greenhouse	6.0m x 12.4m 3 bay (vented)	\$27300.00

2.11.4 Shelter and Windbreak Cloth

DONAGHYS

<u>Width</u>	<u>Length</u>	<u>Wholesale price/Roll</u>
Windbreak Cloth		
3ft (0.91 m)	50 m	\$ 63.29
3ft (0.91 m)	100 m	\$126.59
6ft (1.83 m)	50 m	\$108.66
6ft (1.83 m)	100 m	\$217.30
9ft (2.74 m)	50 m	\$160.51
9ft (2.74 m)	100 m	\$321.04

Windfilter Cloth - High Porosity Windbreak

6ft (1.83 m)	50 m	\$131.80
9ft (2.74 m)	50 m	\$204.13

Shade Cloth (Woven)

<u>Grade</u>	<u>Roll Size</u>	<u>Wholesale Price/Roll</u>
Very Light Approx. 30-35% Shading	6ft (1.83m) x 50m	\$164.89
Light Approx. 45-50% Shading	6ft (1.83m) x 50m	\$180.59
Med. Approx. 65-70% Shading	6ft (1.83m) x 50m	\$220.44
Heavy Approx. 75-80% Shading	6ft (1.83m) x 50m	\$253.26

Shade Cloth (Knitted)

<u>Grade</u>	<u>Roll Size</u>	<u>Wholesale Price/Roll</u>
Very Light Approx. 35-40% Shading - Green/ Black	6ft (1.83m) x 50m 6ft (1.83m) x 50m	\$236.11 \$222.40
Light Approx. 45-50% Shading - Green/Black Black/Black	6ft (1.83m) x 50m 6ft (1.83m) x 50m	\$258.61 \$230.76
Med. Approx. 65-70% Shading - Green/Black	6ft (1.83m) x 50m	\$315.68

Black/Black	6ft (1.83m) x 50m	\$283.98
Heavy Approx. 75-80%		
Shading - Green/Black	6ft (1.83m) x 50m	\$401.39
Black/Black	6ft (1.83m) x 50m	\$360.90

2.11.5 Fertiliser

FRUITFED LTD (1986 Prices)

Potassium Nitrate		\$ 3.48/kg
Sulphate of Ammonia	\$ 1.03/kg	\$ 65.00 (50 kg)
Standard		\$315.35 (per t)
Granulated		\$336.58 (per t)
Sulphate of Iron	\$ 1.25/kg	\$ 30.31 (50 kg)
Sulphated Potash	\$ 2.63/kg	\$ 65.66 (50 kg)
Sulphur	\$ 0.95/kg	\$ 23.41 (50 kg)
Super	\$ 15.86(50kg)	\$177.90 (per t)
Lime Reverted Super		\$138.43 (per t)
Boron Super		\$211.27 (per t)
Cobalt Super		\$211.27 (per t)
Copper Super		\$210.74 (per t)
Molybdate Super		\$168.43 (per t)
15% Potash Super		\$184.06 (per t)
23% Potash Sulphur Super		\$231.79 (per t)
50% Potash Super		\$257.59 (per t)
Potash Super 600		\$222.43 (per t)
Sulphur Super		\$203.06 (per t)
Sulphur Super Extra		\$224.95 (per t)
Potash Molybdate Super		\$235.32 (per t)
Nitrogen Super		\$222.42 (per t)
Urea	\$ 1.39/kg	\$ 27.81 (40 kg)
		\$500.00 (per t)
Nitrophoska - Nitrogreen C.A.N.	\$ 1.73/kg	\$ 24.61 (50 kg)
		\$630.53 (per t)
Nitrophoska - Blue TE	\$ 2.10/kg	\$ 50.18 (50 kg)
		\$834.27 (per t)
Nitrophoska - Blue Extra		\$913.43 (per t)
Nitrophoska - 12 to 10		\$701.00 (per t)
Nitrophoska Yellow		\$803.32 (per t)
Nitrophoska Foliar		\$ 24.25 (5 l)
		\$ 86.00 (20 l)
Calcium Nitrate	\$ 2.76/kg	\$ 43.78 (50 kg)
Calcium Chloride		\$ 23.19 (25 kg)
Dolomite	\$ 0.98/kg	\$ 19.40 (40 kg)
Magnesium Sulphate	\$ 1.82/kg	\$ 45.59 (50 kg)
Manganese Sulphate	\$ 2.62/kg	\$ 65.52 (50 kg)
Muriated Potash	\$ 0.98/kg	\$ 24.61 (50 kg)
Orchard Regular NPK	\$ 0.84/kg	\$ 20.89 (50 kg)

Orchard High K	\$ 0.84/kg	\$259.42 (per t) \$ 20.97 (50 kg)
NPK Cropmix 10	\$ 0.84/kg	\$260.63 (per t) \$ 21.02 (50 kg)
Cropmix TNR		\$265.21 (per t) \$188.06 (per t)
Cropmix Straight		\$237.69 (per t)
Cropmix with Boron		\$246.90 (per t)
Cropmaster D.A.O.		\$547.27 (per t)
Cropmaster 13		\$511.69 (per t)
Cropmaster 15		\$463.90 (per t)
Cropmaster 16 High Potassium	\$ 1.37/kg	\$ 34.14 (50 kg) \$469.69 (per t)
Cropmaster 18	\$ 1.42/kg	\$ 35.51 (50 kg) \$489.00 (per t)
Cropmaster 20		\$461.00 (per t)
Fruitfed Liquid Feed	\$ 2.58/litre	\$347.92 (200 l)
Blood and Bone	\$ 0.96/kg	\$ 24.70 (50 kg) \$400.00 (per t)
Potassium Chloride		\$330.69 (per t)
Potassium Sulphate		\$984.74 (per t)

FARMERS FERTILISER

Wuxal NPK 9-4-6	5 litre	\$ 23.75
	20 litre	\$ 83.20
	200 litre	\$766.00
Wuxal Calcium 15-0-0-16-2	10 litre	\$ 62.50
ca-mg	25 litre	\$156.25
Wuxal L/V 16-1-12	20 litre	\$122.20

Fertiliser Spreader:

Fertiliser Spreader SP 40	\$1791.00
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2.11.6 Soil Fumigants

BASF

Basamid Gran.	dazomet (90.0)	450 g	\$ 11.48
		2.5 kg	\$ 33.10
		20 kg	\$223.80
BASF Metam	metam sodium (56.0)	210 litre	\$716.10

FRUITFED LTD (1986 Prices)

Actellic No. 20	each	\$ 10.20
Larnacide	25 kg	\$150.00
Methyl Bromide	1 ml	\$ 3.26

SHELL

D.D. Soil Fumigant	23 kg	\$106.26
	245 kg	\$999.60

2.11.7 Growth Regulants**BASF**

MH30	maleic hydrazide (36.0)	20 litre	\$ 242.60
		200 litre	\$2186.00

BAYER

Cycocel 750	chlormequat chloride (75)	1 litre	\$ 15.00
		25 litre	\$ 252.20

FARMERS FERTILISER LTD

Alar 85	daminozide (85.0)	500 g	\$ 94.88
		2 kg	\$ 357.26
Alar 85 Male Kiwifruit Injector Kit			\$ 90.00
Ispray Fatol fatty alcohols (73.0)		20 litre	\$ 174.80
Super		200 litre	\$1596.00

FRUITFED LTD (1986 Prices)

Ethrel 48	chlorethephon	1 litre	\$ 82.10
Fulset	2-naphthoxyacetic acid	250 ml	\$ 3.74
		2 litre	\$ 13.07
Stop drop	2,4-D amine salt (18.2)	5 ml	\$ 6.35

MAY & BAKER

Seradix	No. 1, 2	30 g	\$ 5.72
		600 g	\$ 28.22
Seradix	No. 3	30 g	\$ 9.25
		600 g	\$ 45.77

2.11.8 Herbicides**FRUITFED LTD (1986 Prices)**

Alicep	chlorbufan (20.0) plus chloridazon (25.0)	2 kg	\$ 93.64
Alloxol	alloxydim sodium (75.0)	2 kg	\$124.44
Alloxol S	sethoxydim (20.0)	1 litre	\$ 59.97
Asulox	asulam (40.0)	5 litre	\$ 95.57
Atrazine	atrazine (80.0)	5 litre	\$ 57.75
Caragard 500	terbuthylazine (25.0)	5 litre	\$ 93.00
F.W.	plus terbumeton (25.0)		
Caragard		20 litre	\$354.00

Casoron 7.5G	dichlobenil (7.5)	25 kg	\$189.75
Foresite		5 litre	\$220.50
Fusilade	fluazifop-butyl (25)	1 litre	\$ 62.00
		5 litre	\$297.00
Gesatop 500W	simazine (50.0)	5 litre	\$ 49.05
Gesatop		20 litre	\$189.00
Goal	oxyflurofen (24.0)	1 litre	\$ 59.00
		5 litre	\$268.50
Gramoxone	paraquat (50.0)	5 litre	\$ 68.60
		20 litre	\$272.20
Kerb 50-W	propyzamide (50.0)	1.5 kg	\$ 81.00
Lasso	alachlor (50.0)	5 litre	\$ 65.20
Linuron 50	lindane (50.0)	2 kg	\$ 47.60
		3 kg	\$ 71.40
Network	glyphosate (50.0)	1 litre	\$ 13.70
Preeglone	diquat (6.0)	5 litre	\$ 84.25
	paraquat (12.0)	20 litre	\$330.78
Prefix	chlorthiamid (7.5)	1 kg	\$ 55.11
		25 kg	\$230.50
Reglone	diquat (20.0)	5 litre	\$ 81.60
		20 litre	\$332.40
Roundup	glyphosate (36.0)	1 litre	\$ 38.82
		20 litre	\$607.80
Sencor 70 WP	metribuzin (70.0)	1.5 kg	\$141.50
Sinbar	terbacil (80.0)	1 kg	\$ 74.30
Surflan	oryzalin (75.0)	2 kg	\$ 99.00
Torpedo	diquat (10.0)	20 litre	\$222.80
Tribunil 70 WP	methabenzthiazuron (70.0)	1.5 kg	\$ 56.10
		1.5 kg	\$ 56.10
Weedazol	amitrole (40.0)	1 litre	\$ 15.21
		5 litre	\$ 62.55
		20 litre	\$239.80

SHELL

Prefix D	chlorthiamid (7.5)	5.5 kg	\$ 44.00
		20 kg	\$157.80
Shell Alachlor		5 litre	\$ 65.20
		20 litre	\$ 221.80
		200 litre	\$2198.00
DNBP (Amine)		20 litre	\$ 142.40

MAY & BAKER

Foresite		1 litre	\$ 47.63
		5 litre	\$220.50
Surflan	oryzalin (75.0)	2 litre	\$102.50
		5 litre	\$193.00
Totril	ioxynil (25.5)	20 litre	\$727.00

Surflan pre-em oryzalin (50.0)	5 litre	\$172.35
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2.11.9 Fungicides

BASF

Aviso	metiram (75.2) plus cymoxanil (.59) 25 kg	2 kg \$ 342.50	\$ 29.90
Bavistan FL	carbendazim (50.0)	1 litre 5 litre 20 litre	\$ 57.95 \$ 279.50 \$1105.00
Calirus	benodanil (50.0) 1 kg	\$ 57.05	
Kumulus S	sulphur (80.0)	25 kg	\$ 88.75
BASF Mancozeb mancozeb (80.0)		2 kg 25 kg	\$ 15.40 \$ 170.00
Pallinal	metiram (60.0) plus nitrothal-isopropyl (1.25)	25 kg	\$ 357.50
Pallitop	nitrothal-isopropyl(40.0)	20 kg	\$ 406.00
Polyram 2000 80WP	metiram (80.0)	25 kg	\$ 291.25
Ronilan	vinclozolin (50.0)	1 kg 20 kg	\$ 78.80 \$1524.00
Ronilan FL	vinclozolin (50.0)	1 litre 5 litre 20 litre	\$ 85.30 \$ 417.25 \$1638.00

BAYER

Bayleton WP	carbendazint plus tridimefon (15.0)	2 kg	\$192.00
Bayleton 125	tridimefon (25.0)	5 litre	\$362.34

FARMERS FERTILISER

Afugan 30 EC	pyrazophos (30.0)	1 litre	\$ 65.20
Difolatan 5 F	captafol (50.0)	5 litre 20 litre	\$109.70 \$409.00
Difolatan 80S prills	captafol (80.0)	11 kg	\$386.10
Difolatan 80W	captafol (50.0)	2 kg 25 kg	\$ 64.80 \$769.75
Fungaglor 75 WSP	imazalil (75.0)	100 g	\$ 85.00
Orthocide 80W	captan (80.0)	2 kg 25 kg	\$ 31.24 \$367.25
Phaltan 50W	folpet (50.0)	2 kg 25 kg	\$ 47.50 \$559.50
Plantivax 75W	oxycarboxin (75.0)	500 g	\$ 55.71
Saprol 20 EC	triforine (19.0)	2 litre 5 litre 20 litre	\$ 65.00 \$159.35 \$618.80
Thiram	thiram (80.0)	20 kg	\$183.80

FRUITFED LTD (1986 Prices)

Agrimycin 17	streptomycin (17.0)	600 g	\$ 26.68
Apollo 50 sc	clofentezine (50.0)	2 litre	\$240.00
Attack	pirimiphos (47.5) plus permethrin (2.5)	1 litre	\$ 36.00
Benlate	benomyl (50.0)	1 kg	\$ 59.40
Bluestone		25 kg	\$ 34.54
Captan 80	captan (80.0)	2 kg	\$ 29.08
		20 kg	\$281.00
Copper oxychloride	copper oxychloride (50)	25 kg	\$116.25
Difolatan 80 W	captafol (800.0)	2 kg	\$ 64.70
		20 kg	\$614.80
Dinamin A		1.5 kg	\$ 53.55
Dinoseb Amine		1 litre	\$ 2.60
		5 litre	\$ 31.15
Dithane M22	maneb (80.0)	2.5 kg	\$ 17.50
Dithane M45	mancozeb (80.0)	2.5 kg	\$ 21.00
Dodine	dodine (40.0)	5 ml	\$ 76.50
Gusathion M50	azinphos-methyl(50.0)	2 kg	\$ 53.40
		15 kg	\$ 383.20
Kilval	vamidothion (40.0)	1 litre	\$ 19.64
		5 litre	\$ 96.00
Kocide 101	cupric hydroxide (50.0)	1.8 kg	\$ 21.74
		2 kg	\$ 24.16
		10 kg	\$ 106.40
Lime hydrated	(ex works)	tonne	\$ 184.82
	(ex store)	tonne	\$ 246.82
	20 - 39 bags	25 kg	\$ 6.86
	1 - 19 bags	25 kg	\$ 7.62
Lime Sulphur		20 litre	\$ 38.51
Nimrod	bupirimate (25.0)	5 kg	\$ 100.00
Orthocide 10		2 kg	\$ 29.18
Dust		25 kg	\$ 335.40
Pallinal	metiram (60.0) plus nitrothal-isopropyl (12.5)	25 kg	\$ 333.75
Pallitop	nitrothal-isopropyl (48.0) plus metiram(0.32)	20 kg	\$ 335.40
Polyram Combi	metiram (80.0)	25 kg	\$ 175.00
Polyram 200	metiram (80.0)	25 kg	\$ 333.75
Ridomil 5G	metalaxyl (5.0)	5 kg	\$ 67.00

Ridomil 72 WP	metalaxyl (80.0) plus mancozeb (64.0)	20 kg	\$ 258.00
Ronilan	vinclozolin (50.0)	1 kg	\$ 75.10
Ronilan Flo	vinclozolin (50.0)	1 litre	\$ 79.26
		5 litre	\$ 387.20
Saprol	triforine (19.0)	5 litre	\$ 119.45
		20 litre	\$ 464.80
Sumislex 25	procymidone (25.0)	5 litre	\$ 190.00
Thiram 80 W	thiram (80.0)	2 kg	\$ 24.04
Tilt 250 EC		2 litre	\$ 159.96
		5 litre	\$ 388.85
Zinc Sulphate		50 kg	\$ 88.93

ICI NEW ZEALAND LTD

Nimrod	bupirimate (25.0)	5 kg	\$100.00
Sumislex 25	procymidone (50.0)	1 litre	\$ 39.00
Flowable		5 litre	\$190.00
		20 litre	\$740.00

IVON WATKINS-DOW LTD

Protek S (antisapstain)		20 litre	\$384.80
Topsin M-4A	thiophanate-methyl (40)	5 litre	\$103.55

MAY & BAKER

Rovral Flo 250	iprodione (25.0)	1 kg	\$ 78.72
		5 litre	\$ 208.00
Rubigan 12 W	fenarimol (12.0)	1 kg	\$ 71.50
Rubigan 12 EC	fenarimol (12.)	1 litre	\$ 86.35
		5 litre	\$ 421.20
Rubigan Flo	fenarimol (12.0)	1 litre	\$ 78.65

SHELL

Kocide 101	cupric hydroxide (50)	1.8 kg	\$ 21.75
		10 kg	\$ 106.40

2.11.10 Insecticides

BASF

Dibrom 870	naled (87.0)	1 litre	\$ 27.99
		5 litre	\$ 132.60
Hostathion 40EC	triazophos (40.0)	5 litre	\$ 155.00
Monitor	methamidophos (60.0)	1 litre	\$ 34.80
		5 litre	\$ 163.00
		20 litre	\$ 621.80
		200 litre	\$5514.00

BAYER

Baythroid 5EC	cyfluthrin (5.0)	1 litre	\$ 43.00
		5 litre	\$ 211.00
Folidol M 50	parathion-methyl (60.0)	1 litre	\$ 27.00
		25 litre	\$ 535.00
Mesurol 75 WP	methiocarb (75.0)	1.5 kg	\$ 103.00
		25 kg	\$1669.00
Mesurol Snail Baits	methiocarb (2.0)	5 kg	\$ 54.00
		10 kg	\$ 94.00
Nemacur 400 EC	fenamiphos (40.0)	1 litre	\$ 41.00
		10 litres	\$ 399.00
		25 litres	\$ 956.00
Tamaron 600 LC	methamidophos (60.0)	1 litre	\$ 35.00
		25 litre	\$ 776.00
		200 litre	\$5510.00
Tokuthion 500 EC	prothliefos (50.0)	1 litre	\$ 61.00
		5 litre	\$ 304.00

FARMERS FERTILISER LTD.

Ispray azin-phos methyl	azinphos-methyl (50.0)	1.5 kg	\$ 41.76
		15 kg	\$ 390.60
Ispray carbaryl 80 W	carbaryl (80.0)	1.5 kg	\$ 28.92
		15 kg	\$ 267.45
Decis 2.5 EC	deltamethrin (2.5)	1 litre	\$ 66.29
		5 litre	\$ 298.25
Diazinon 50W	diazinon (50.0)	2 kg	\$ 41.76
Ekamet 50 EC	Etrinfos (50.0)	5 litre	\$ 270.00
Furadon 75W	carbofuran (75.0)	500 g	\$ 26.51
Ispray Lindane 50 W		2 kg	\$ 42.88
Omite	propargite (30.0)	2 kg	\$ 51.88
Temik 10G	aldicarb (10.0)	2 kg	\$ 259.35
Thiodan 35EC	endosulfan (35.0)	1 litre	\$ 23.42
		5 litre	\$ 98.10
		20 litre	\$ 384.20

FRUITFED LTD (1986 Prices)

Ambush 50 EC	permethrin (50.0)	500 ml	\$ 93.50
Carbaryl 80 W	carbaryl (80.0)	2 kg	\$ 36.60
		20 kg	\$ 338.60
		1 litre	\$ 40.40
Folimat 50 SC	omethoate	5 litre	\$ 104.50
Lannate L	methomyl (20.0)	20 litre	\$ 408.00
Lawnguard D Prills	diazinon (5.0)	680 g	\$ 6.50
Lindane	lindane (20.0)	2 kg	\$ 40.76
Lorsban 40 EC	chlorpyrifos (40.0)	5 litre	\$ 165.40

Lorsban 50W	chlopyrifos (50.0)	2 kg	\$ 79.90
Malathion 25 WP	maldison (25.0)	2 kg	\$ 23.28
Malathion 50 EC	maldison (50.0)	5 litre	\$ 43.50
		20 litre	\$ 156.00
Malix	endosulfan (35.0)	5 litre	\$ 91.85
Mesuro 75 WP	methiocarb (75.0)	1.5 kg	\$ 102.81
Mesuro 1 Snail Bait	methiocarb (2.0)	10 kg	\$ 94.00
Nuvan 100	dichlorvos (100.0)	500 ml	\$ 12.20
		5 litre	\$ 107.00
Orthene 75	acephate (75.0)	500 g	\$ 26.25
Phosdrin 400	mevinphos (40.00)	2.5 litre	\$ 73.20
Sumiciden 10	fenvalerate (10.0)	500 g	\$ 4.93
Thiodan 35 EC	endosulfan (35.5)	1 litre	\$ 22.10
Vapona conc.	dichlorvos (108.0)	1 litre	\$ 25.58

2.11.11 Miticides

BAYER

Peropal 25 WP	azocyclotin (25.0)	2 kg	\$ 69.00
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FRUITFED LTD (1986 Prices)

Peropal		2 kg	\$ 83.40
Pirimor 50	pirimicarb (50.0)	1 kg	\$ 45.35
Plictran 600F	cyhexatin (60.0)	2 litre	\$ 180.00
Plictran 50W	cyhexatin (50.0)	2 kg	\$ 98.40

IVON WATKINS-DOW LTD

Plictran 600F	cyhexatin (60.0)	2 kg	\$ 180.00
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2.11.12 Spray Equipment

FIENI AIRBLAST - Standard - Range

Fan-920-Assy	Fieni 920mm	2 speed vari. pitch fan with stainless shroud - 80,000 CMH - 20 double swingover nozzles	\$3960.00
Fan-820-Assy	Fieni 820mm	2 speed fan with stainless air shroud, 72,000 CMH - clutch - 20 double swingover nozzles & vari. pitch	\$3660.00
Fan-720-Assy	Fieni 720mm	2 speed fan with stainless air shroud, 52,000 CMH - clutch - 16 double swingover nozzles	\$3142.00

Fan-620-Assy	Fieni 620mm	2 speed fan with galvanised air shroud - 35,000 CMH - 12 double swingover nozzles	\$2523.00
363-101-5	Braglia	8 nozzle adjustable hi-pressure Spray Head on turntable	\$ 698.00

Cropliner

<u>Attachment</u>	<u>Pump</u>	<u>2000 lt</u>	<u>1500 lt</u>	<u>1000 lt</u>
920 mm Fan	AR150 litre/m	\$12380.00	\$11734.00	\$11417.00
920 mm Fan	AR120 litre/m	\$11927.00	\$11361.00	\$11044.00
920 mm Fan	AR 90 litre/m	\$11225.00	\$10659.00	\$10342.00
820 mm Fan	AR150 litre/m	\$12000.00	\$11434.00	\$11117.00
820 mm Fan	AR120 litre/m	\$11627.00	\$11061.00	\$10744.00
820 mm Fan	AR 90 litre/m	\$10925.00	\$10359.00	\$10042.00
720 mm Fan	AR150 litre/m	\$11482.00	\$10916.00	\$10599.00
720 mm Fan	AR120 litre/m	\$11109.00	\$10543.00	\$10226.00
720 mm Fan	AR 90 litre/m	\$10407.00	\$ 9841.00	\$ 9524.00
620 mm Fan	AR150 litre/m	\$10863.00	\$10297.00	\$ 9980.00
620 mm Fan	AR120 litre/m	\$10490.00	\$ 9924.00	\$ 9607.00
620 mm Fan	AR 90 litre/m	\$ 9788.00	\$ 9222.00	\$ 8905.00
Braglia	AR150 litre/m	\$ 8687.00	\$8121.00	\$7804.00
Braglia	AR120 litre/m	\$ 8314.00	\$7748.00	\$7431.00
Braglia	AR 90 litre/m	\$ 7612.00	\$7046.00	\$6729.00
Nil	AR150 litre/m	\$ 7989.00	\$7423.00	\$7106.00
Nil	AR120 litre/m	\$ 7616.00	\$7050.00	\$6733.00
Nil	AR 90 litre/m	\$ 6914.00	\$6348.00	\$6031.00

MAY & BAKER

Spotomatic Sprayer	- Complete Unit	\$125.95
	- Nursery Wand	\$ 19.95

2.11.13 Tractors

Same (1986 Prices)

Minitaurus Fruetto Orchard	2WD, 60 HP, 8 Spd Synchro	\$23,900
	4WD, 60 HP, 14 Speed,	\$27,900
Corsaro 70, 70 HP, 4WD Orchard		\$28,750

FECO

M.T.D. Garden Tractor

Model 504 8 HP	Incl. of 30" Rotary Mower	\$ 3,750
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504		038 Grass Catcher	\$ 475
632	11 HP	Incl. of 38" Rotory Mower	\$ 4,875
632		064 Grasscatcher	\$ 750
682	14 HP twin	Incl. of 44" Rotory Mower	\$ 5,990
882	18 HP twin	Incl. of 44" Rear Del. Mower	\$ 7,990
21" Gang Mower Units		each	\$ 995

2.11.14 Orchard Mowers

GMS - FRUITFED LTD (1986 Prices)

Model	Width		Price
	Feet	Metres	
1350	4'3"	1.38	\$2,900
1650	5'3"	1.58	\$3,350
1800	6'	1.84	\$4,150
2100	7'	2.14	\$4,300
2300	7'6"	2.24	\$4,400
2600	8'6"	2.60	\$4,880
2800	9'	2.80	\$4,980
3000	10'		\$5,480
3300	10'9"	3.36	\$3,680
3800	12'6"	3.92	\$6,300

Pearce Series C Mulching Mowers

5' Cut	\$4,965
6' Cut	\$5,015
7' Cut	\$5,065

Hydraulic Side Shift ram	\$ 473
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Gallagher Rotomow/Pulverizer

Orchard and topping mower

Offset right-18kW (25 HP) min at pto	1.22m	\$ 4,415
Offset right-22kW (30 HP) min at pto	1.52m	\$ 4,648
Offset right-30kW (40 HP) min at pto	1.83m	\$ 4,880
Offset right-33kW (45 HP) min at pto	2.13m	\$ 4,976

2.11.15 Forklifts

LEES INDUSTRIES LTD

NYK FE 3000	Battery Electric	\$34,500
NYK FB 15P	Battery Electric	\$39,088

2.11.16 Planting/Propgating Material

Planterbags - Range from \$3.00 to \$35.00 per 100 depending on pot size.

Peat - Growers bale 340 litre \$26.00
 Plastic labels 13 cm \$35.00 per 1000.

		Black/m	Clear/m
Polythene Film	1000mm x 125m	\$0.69	\$0.70
	2000mm x 125m	\$1.14	\$1.38
	4000mm x 125m	\$1.75	\$1.85

2.11.17 Pruning Equipment

FRUITFED LTD

Pneumatic

Limbblocker	- V3, vinepruner	\$350.00
Maibo	- SE2 medium duty vine pruner	\$296.00
	- SE4 suitable most horticultural work	\$316.00
	- SE6 heavy duty pruner	\$440.00

Vineyard Pruners

V3 without hose	\$350.00
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Pruning Rake (1986 Price)	\$1680.00
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Hand Pruners

Felco No. 2	\$47.11
LH snapcut	\$36.75
Felco No. 4	\$25.16
Felco No. 6	\$27.84
Felco No. 7	\$48.84

Hydraulic Ladder (1986 Price)

Pruner	\$750.00
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Secateurs (1986 Prices)

Lion Secateurs		\$16.24
Nylex 312 Large		\$39.31
Felco No. 2 and No. 8	Pair	\$38.80
Pardine 10/23	Pair	\$11.48
Pardine No. 18	Pair	\$41.76
Snapcut 19T	Pair	\$15.03
Snapcut 149 LH	Pair	\$36.75
Wilkenson	Pair	\$39.11
Nylex LH	Pair	\$36.00
Thinners	Pair	\$ 4.00
Nylex Lopping Shear Small	Pair	\$34.56
Secateur Spares - Blades and Rivets	Each	\$10.42
Secateur Pouch	Each	\$10.00
Secateur Belt		\$ 8.60
Snapcut - Long handled loppers 145		\$29.23

Lion	- Long handled loppers	\$54.05
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Saws (1986 Prices)

Diston No. 38	\$26.50
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Pardine No. 340	\$14.20
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Knives (1986 Prices)

Sandvik P11 Budding	\$17.10
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Sandvik P11 Grafting	\$20.54
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Budding Tape	Roll	\$ 1.35
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Carborundum Stone Pocket		\$ 2.30
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Flintkote	4 litre	\$14.95
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Gimp Pins	Packet	\$ 1.00
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Prowax	2.5 kg	\$16.79
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Power Prune (Howard Rotovator) (Incl. GST)

Power Prune 250	\$592.00
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Primus 2000 (LPG Bottle)	\$ 46.98
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Bottle Holster	\$ 15.40
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2.11.18 Mechanical Protection

FRUITFED LTD (1986 Price)

Hydrel 1500 Portable Probe 2501, 50 cm	\$ 54.00
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Bird Scarers (1986 Prices)

Exide Birdscarer complete with clock	\$505.20
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Exide with Timer	\$538.75
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4.5 kg cylinder	\$ 70.88
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Gas Unit	\$ 6.77
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Razzo (complete)	\$485.00
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Frost Alarm

Raco alarm (Complete)	\$393.91
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2.11.19 Picking Equipment

FRUITFED LTD

Ladders

Fed Hoist Highpick Ladder Basic Model	\$11,167.00
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Aprons (1986 Prices)

Apron	Each	\$ 36.90
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Picking Apron	Each	\$ 38.65
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Bags/Buckets (1986 Prices)

Picking Bags		\$ 39.40
Picking Buckets		\$ 77.75
SF Bucket		\$ 46.35
PF Bucket		\$ 75.00
PF Bucket Strap		\$ 14.50
PF Bucket Skirt		\$ 32.00
SF Bucket Skirt		\$ 20.00
PF Bucket Strap Harness		\$ 35.70
PF Bucket Strap Habbing		\$ 16.00

Sizing Rings (1986 Prices)

Topliss Brass Set		\$ 26.50
Formica		\$ 1.50
Bartlett		\$ 11.33

2.11.20 Packaging Equipment

FRUITFED LTD

Cases (1986 Prices)

7 x 7" Wood Cases	100	\$ 206.00
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Cartons (1986 Prices)

20 lb Box	1000	\$1156.00
Lid (Brown)	1000	\$ 854.00
Lid (White)	1000	\$ 751.00
2 kg Cherry Carton (White)	1000	\$ 765.00
4 kg Cherry Carton (White)	1000	\$1300.00
Cherry Outer Carton	1000	\$1411.00
Local Tray and Lid	1000	\$1813.00
4.5 kg Tomato box (Card board)	1000	\$ 775.00
4.5 kg Stonefruit (Card board)	1000	\$ 758.00

Berry Containers

L.M. Strawberry tray	100	\$ 67.12
Export Strawberry tray	100	\$ 120.18
3 kg bulk berry pack	100	\$ 237.90
9 kg gate sale box (White)	100	\$ 68.90
2.5 kg gate sale box (White)	100	\$ 31.10
4.5 kg tomato/store fruit box and full liners	100	\$ 69.90

Apple Bags

Plain - 5 kg	1000	\$ 64.80
- 9 kg	1000	\$145.80
Cellophane 225 x 225 plain	1000	\$ 17.73
300 x 400 plain	1000	\$ 34.54

<u>Punnets</u>		
8 oz No. 50	1000	\$ 96.66
12 oz No. 75	1000	\$102.44
1.5 kg light	1000	\$314.23

Poly Bags (1986 Prices)

Printed	- 1 kg	100	\$ 3.80
	- 2 kg	100	\$ 6.10
	- 3 kg	100	\$ 8.50
	- 4 kg	100	\$ 9.50
	- 5 kg	100	\$ 11.00
Plain	- 1/2 kg	100	\$ 2.84
	- 1 kg	100	\$ 3.08
	- 2 kg	100	\$ 4.83
	- 5 kg	100	\$ 9.75
	-10 kg	100	\$ 21.89
	-20 kg	100	\$ 30.19

Bag Ties

10 mm x 19 g wire ties (per 2000)		\$ 23.18
Twistits	- 10cm Box of 2500	\$ 4.91
	- 20cm Box of 2500	\$ 7.93
	- 23cm Box of 2500	\$ 9.83
	- 30cm Box Of 2500	\$ 12.77

Scales (1986 Prices)

Salter 250 x 10 kg	Set	\$469.41
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<u>Rubber Bands</u>	Packet	\$ 10.00
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Tape Dispenser

H120		\$ 8.00
Strapex 25 mm		\$ 30.00
Strapex 48 mm		\$ 45.00

Glue

5 litre		\$ 40.00
20 litre		\$ 56.00
Label Paste	2.5 kg	\$ 11.50

Nails

30 mm	30 kg	\$ 75.00
40 mm	2 kg	\$ 70.00
Small Quantities	per kg	\$ 6.00

<u>Stamping</u>		
Stamp Pad	- Small	\$ 3.29
Stamp Pad Ink	- 100 ml	\$ 3.35

2.11.21 Cool Storage

N.A. PIERSON LIMITED

Casual Storage under	5000 kg	= 3 c/kg/month or part thereof
	5000 kg	= 2 c/kg/month or part thereof
	over 10000 kg	= 1.5c/kg.month or part thereof
Contract Storage		= 3 c/kg/month or part thereof
Blast Freezing	Free, providing product stored with company	
Storage on a pallet		= \$30.00 per pallet/bin per month
or bin space basis		
Overnight storage charge		= \$5.00 per pallet

Minimum:

Storage charge per month any product = \$20.00

2.11.22 Horticultural Levies

Berryfruit

Less than 250 sq metres	Nil
250 sq m but not over 8000 sq m	\$100.00
8000 sq m and over	\$187.50

Blackcurrants

A levy of 1.5 cents per kilogram shall be paid in respect of all blackcurrants sold for processing or export (over and above the general berryfruit levy).

Blueberries

All growers pay 20c per kilogram for all blueberries sold fresh or for export. In respect to this, the exporter adds a further 4c/kg (voluntary) therefore levy is 24c/kg.

Boysenberries

A 3c per kilogram fixed applies for all export and processed boysenberries.

Raspberries

North Island raspberries under The Berry Federation. Flat rate of \$25/garden.

South Island raspberries divided into three regions, each with own levy system.

Canterbury: Levy of \$3.75 per decare, if a producer. To be a producer, must have a tenth of a hectare. Maximum of \$300.

Pip and Stonefruit, Subtropical and Citrus

\$10 per ha with a minimum of \$40 and a maximum of \$400.

Apples

First tier capital charge - levy on extra production supplied to Apple and Pear Marketing Board by new grower (or existing grower with extra crop).
50c per carton equivalent.

Citrus Fruit:

Approximately 6c per bushel levy for promotion.

Vegetables

Registration fee to Vegetable Federation.

Fresh vegetables: 4% of purchasing price. 0.25% of gross price to growers at first point of sale, free of any deductions.

Processed vegetables: .5625% of price at which vegetables are purchased for processing or canning.

Asparagus 2% of purchase price, voluntary levy for promotion, payable to Asparagus Council.

Fresh Tomatoes

Voluntary levy of 5% of purchase price for promotion, payable to Fresh Tomato Industry Fund. Exporters of onions, squash and buttersquash.

Voluntary levy of 50c/t.

2.12 WEED AND PEST CONTROL

Many herbicides, fungicides, and insecticides are produced by the various chemical companies and these come in ranges of strengths. This Budget Manual does not endorse any particular product or company and the trade names given are to serve only as examples of the chemical concerned.

All prices are per litre or per kilogram being determined from the smallest pack size of the chemical available. The second figure in each case is a price for a large pack - 20 litres or 25 kg unless otherwise stated.

2.12.1 Herbicides

For the prescribed rates of application for the various chemicals and the weeds they control, see Section 17 in the Technical Manual, "Weed and Pest Control".

<u>Trade Name</u>	<u>Active Ingredient (%)</u>	<u>Unit Size</u> <u>Price</u>	<u>Retail</u>
<u>ICI NEW ZEALAND</u>			
Avenge 200A	difenzoquat (20.0)	20 litre	\$481.00
Dicambone 75D	dicamba (7.5), 2,4-D amine salt (30.0)	5 litre	\$209.20
		20 litre	\$229.80
Dicambone 5G	dicamba (5.0)	4 kg	\$ 28.36
		18 kg	\$120.42
Dicamba	dicamba (20.0)	5 litre	\$101.45
		20 litre	\$399.80
Dinoseb	dinoseb (36.0)	20 litre	\$125.82
Embark 2-S	mefluidide (24.0)	2 litre	\$110.14
Fusilade	fluazifop-butyl (25.0)	1 litre	\$ 62.00
		5 litre	\$297.00
Goal	oxyfluorfen (24.0)	1 litre	\$ 59.00
		5 litre	\$298.00
Gramoxone	paraquat (20.0)	5 litre	\$ 68.60
		20 litre	\$272.20
Nortron	ethofumesate (20.0)	5 litre	\$115.00
		20 litre	\$438.60
Nortron SC	ethofumesate (50.0)	2 litre	\$ 91.52
Preeglone	diquat (6.0)	5 litre	\$ 84.25
	paraquat (12.0)	20 litre	\$330.78
Reglone	diquat (20.0)	5 litre	\$ 81.60
		20 litre	\$322.40
Spraygrow	diquat (2.5)	5 litre	\$ 57.75
	paraquat (15.0)	20 litre	\$227.20

Torpedo	diquat (10.0)	20 litre	\$222.80
Trident	dicamba (1.87) plus dichlorprop (60.0)	20 litre 200 litre	\$254.00 \$2478.00
	MCPA (15.0)		
Trimec	dicamba (1.87) plus MCPA (15.0) plus mecoprop (60.0)	20 litre 200 litre	\$ 254.00 \$2478.00
Velpar L	hexazinone (25.0)	5 litre 20 litre	\$154.00 \$589.00

IVON WATKINS LTD

Actazine 5A	atrazine (50.0)	5 litre 20 litre	\$ 42.40 \$161.40
Alloxol S	alloxydim sodium (75.0)	1 litre	\$ 59.97
Banvine	2,4-D amine salt (20.0) dicamba (10.0)	1 litre 5 litre 20 litre	\$ 17.66 \$ 80.30 \$301.20
Dowpon 740-SP	2,2-dichloropropionic acid (74.0)	25 kg	\$196.00
Eliminex 5A	atrazine (25.0) simazine (25.0)	5 litre 20 litre	\$ 43.25 \$164.40
Fodderkleen	chlornitrofen (20.0) picloram (1.25)	5 litre 20 litre	\$ 60.60 \$230.60
Garlon 520	picloram (5.0) trichlopyr (19.3)	5 litre 20 litre	\$155.80 \$593.60
Hi-Ester	2,4-D	5 litre 20 litre 200 litre	\$ 45.10 \$164.60 \$1528.00
Hi-Ester 2,4,5-T		5 litre 20 litre 200 litre	\$ 135.65 \$ 517.40 \$4810.00
Hi-Foam Concentrate		5 litre 20 litre	\$ 25.15 \$ 98.60
IWD 2,4-D amine	2,4-D amine salt (40.0)	5 litre 20 litre 200 litre	\$ 36.35 \$ 138.40 \$ 134.66
IWD MCPA	MCPA (37.5)	5 litre 20 litre 200 litre	\$ 27.70 \$ 101.00 \$ 940.00
IWD MCPB	MCPB (40.0)	5 litre 20 litre 200 litre	\$ 38.25 \$ 145.40 \$1352.00
IWD 2,4-DB	2,4-DB (40.0)	5 litre 20 litre	\$ 41.30 \$ 157.20
IWD Paraquat	paraquat (20.0)	5 litre 20 litre	\$ 72.85 \$ 289.20
Lontrel	MCPB (50.0)	5 litre	\$ 84.30

Pasture		20 litre	\$ 321.00
Permazol SDA	amitrole (12.5),	500 g	\$ 10.28
	2,2-dichloropropionic	2 kg	\$ 36.62
	acid (25.7)	15 kg	\$ 262.35
	simazine (40.0)		
Phytazol A	amitrole (25.0)	4 kg	\$ 53.76
	2,2-dichloropropionic	15 kg	\$ 192.15
	acid (37.0)		
Selecta 4-CPA	4-CPA (40.0)	5 litre	\$ 55.65
		20 litre	\$ 214.00
Simazol 5A	simazine (50.0)	5 litre	\$ 48.50
		20 litre	\$ 185.00
Sinox PE	dinoseb (36.0)	20 litre	\$ 138.80
Teedal	2,2 dichloropropionic	4 kg	\$ 35.56
	acid (11.0), TCA (63.0)	20 kg	\$ 153.80
Tordon 2G	picloram (2.0)	5 kg	\$ 41.90
		25 kg	\$ 198.00
Tordon 50-D	2,4-D amine salt (20.0)	5 litre	\$ 89.00
	picloram (5.0)	20 litre	\$ 339.40
		10 X 20 l	\$ 329.40
Tordon Brush-	picloram (10.0)	2 litre	\$ 103.64
killer DS	2,4,5-T butyl ester (40)	5 litre	\$ 241.00
		20 litre	\$ 918.20
		200 litre	\$8540.00
Versatill		5 litre	\$ 305.00
		20 litre	\$1164.00
Weedazol 4-L	amitrole (40.0)	1 litre	\$ 16.20
		5 litre	\$ 64.85
		20 litre	\$ 249.40
<u>MAY & BAKER</u>			
Asulox	asulam (40.0)	5 litre	\$ 108.40
		20 litre	\$ 409.00
		200 litre	\$3930.00
Axall	bromoxynil (7.5)	5 litre	\$ 101.40
	ioxynil (7.5)	20 litres	\$ 377.45
	mecoprop (34.5)	200 litres	\$3557.40
Buctril M	bromoxynil (20.0) plus	20 litres	\$ 394.00
	MCPA (20.0)		
Carbetamix 70	carbetamide (70.0)	5 kg	\$ 131.00
Combine	bromoxynil (20.0)	5 litre	\$ 194.00
	ioxynil (20.0)	20 litre	\$ 737.20
Mostox		per litre	\$ 17.46
Proturf		per litre	\$ 64.50
		20 litre	\$ 248.00
Treflan	Trifluralin (40.0)	5 litre	\$ 80.00
		20 litre	\$ 305.00

FARMERS FERTILISER LTD

Buster		2 litre	\$ 71.88
		5 litre	\$ 177.15
Rural Activated Amitrole	amitrole (20.0)	5 litre	\$ 37.90
Casoran G	ammon. thiocyanate (18.3)	20 litre	\$ 145.80
	dichlorobenil (6.5)	2 kg	\$ 20.00
		25 kg	\$ 209.50
Cornox CWK	benazolin (30.0)	1 litre	\$ 52.13
		5 litre	\$ 230.95
Rural Dicamba 20	dicamba (20.0)	5 litre	\$ 128.15
		20 litre	\$ 500.00
Nufarm 2,4-D Ester 80	2,4-D butyl ester (72.0)	5 litre	\$ 45.20
		20 litre	\$ 165.00
		200 litre	\$1522.00
Rural 2,4-D Sodium Salt 80	2,4-D sodium salt (80.0)	40 kg	\$ 250.00
Rural Flowable Atrazine	atrazine (50.0)	5 litre	\$ 51.40
		20 litre	\$ 194.60
Rural Flowable Simazine	simazine (50.0)	5 litre	\$ 51.40
		20 litre	\$ 199.60
Hoegrass 36 EC	diclocop-methyl (37.5)	5 litre	\$ 247.20
		10 litre	\$ 432.00
Hoechst Linuron 50 WP	linuron (49.1)	2 kg	\$ 48.70
		25 kg	\$ 577.50
Nufarm MCPA	MCPA as potassium salt (40.0)	5 litre	\$ 27.60
		20 litre	\$ 99.80
		200 litre	\$ 928.00
Nufarm MCPB	MCPB as potassium salt (40.0)	5 litre	\$ 38.35
		20 litre	\$ 146.20
		200 litre	\$1358.00
Rural Sodakem	Sodium chlorate (59.0)	5 kg	\$ 19.40
		25 kg	\$ 82.75
Rural 2,4,5-T Ester 80	2,4,5-T butyl ester (72.0)	5 litre	\$ 135.60
		20 litre	\$ 517.40
		200 litre	\$4808.00
Tri Cornox Special	benazolin (2.5)	20 litre	\$ 179.60
	dicamba (1.6)	200 litre	\$1728.00
	dichlorprop (35.6)		

SHELL AGRICULTURE

Shell Alachlor	alachlor (50.0)	5 litre	\$ 65.20
		20 litre	\$ 221.80
		200 litre	\$2198.00
Banvel 200	dicamba (20.0)	5 litre	\$ 101.45
		20 litre	\$ 399.80

Banvel D	2, 4-D (40.0) plus dicamba (7.5)	5 litre 20 litre	\$ 59.95 \$ 237.80
Bladex	cyanazine (50)	9 kg	\$ 99.99
Broadside	2,4,5-T (60.0)	20 litre	\$ 399.80
Cearex 4	dicamba (1.32)	5 litre	\$ 51.05
	MCPA (10.5)	20 litre	\$ 198.20
	Mecocorp (42.1)	200 litre	\$2010.58
Shell DNPB (amine)	dinoseb (36.0)	20 litre	\$ 142.40
Envoy	cyanazine (11.8)	2.8 kg	\$ 29.99
	MCPA (53.5)	12 kg	\$ 128.52
Shell Paraquat	paraquat (20.0)	5 litre 20 litre	\$ 69.15 \$ 274.20
Salvo	dicamba (1.7) dichlorprop (23.3) MCPA (10.7) mecoprop (21.0)	20 litre	\$ 233.80

YATES

Non hormone

Alachlor 50	alachlor (50.0)	5 litre 20 litre 200 litre	\$ 73.00 \$ 260.80 \$2575.00
Amitrole	amitrole (40.0)	5 litre 20 litre	\$ 60.00 \$ 249.00
Aretit	dinoseb (50.0)	20 litre	\$ 265.60
Dalapon	dalapon (74.0)	25 kg	\$ 195.30
Hoefluran	triflurin (40.0)	5 litre 20 litre	\$ 72.50 \$ 270.00
Kerb 50W	propyzamide (50.0)	1.5 kg	\$ 90.00
Krenite	fosamine (48.0)	2 litre 20 litre	\$ 58.00 \$ 517.00
Paraquat	Glyphosphate (20.0)	5 litre 20 litre	\$ 70.00 \$ 280.00
Tenoran 50 WP	chloroxuron (50.0)	2 kg	\$ 83.40
Vindex SDA	simazine (40.0) delapon (25.0) amatrole (12.5)	2.5 kg	\$ 64.53

MONSANTO

Roundup	glyphosphate (36.0)	1 litre 5 litre 20 litre	\$ 48.87 \$200.18 \$647.02
Avadex		5 litre 20 litre	\$ 88.23 \$324.50
Lasso		20 litre	\$309.76

BAYER

Sencor 70 DF	metribuzin (70.0)	2 kg	\$228.24
Tribunil 70 WP	methabenzthiazuron (70)	1.5 kg	\$ 69.59

BASF

Alicep	chlorbufam (20.0)	2 kg	\$ 96.44
	chloridazon (25.0)	25 kg	\$1139.00
	Amiben	5.45 kg	\$ 243.34
	Basagran	1 litre	\$ 40.20
BASF Linuron	linuron (50.0)	5 litre	\$ 183.95
		20 litre	\$ 718.60
		2 kg	\$ 47.70
		25 kg	\$ 577.50
Pyramin FL	chloridazon(43.0)	3 litre	\$ 97.32
Linex	Linuron (48.0)	9.47 litre	\$ 229.93

2.12.2 INSECTICIDES

For full information regarding common names, proprietary names, and percent a.i., refer to the Handbook of Agricultural Chemicals. For full information regarding rates of application and the pests controlled by the various chemicals, refer to the Technical Budget Manual, Section 17 "Weed and Pest Control" or refer to the book New Zealand Pest and Beneficial Insects, R.R. Scott (Editor), published by Lincoln College, 1985.

Trade Name	Active Ingredient (%)	Unit Size	Retail Price
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ICI NEW ZEALAND LTD.

Actellic Dust	pirimiphos - methyl (50)	5 kg	\$ 31.00
		22 kg	\$106.50
Actellic EC		1 litre	\$ 31.00
		5 litre	\$134.00
Actellic S.G.		90 g	\$ 10.20
Ambush 50 E.C.	permethrin (50.0)	500 ml	\$ 93.50
Attack	pirimiphos-methyl (47.5)	1 litre	\$ 36.00
	permethrin (2.5)	5 litre	\$162.50
Cymbush 10 EC	cypermethin (10.0)	1 litre	\$ 56.00
Pirimor 50	pirimicarb (50.0)	1 kg	\$ 45.35
Thimet	phorate (20.0)	15 kg	\$ 87.75

FARMERS FERTILISER LTD.

Ispray Azinphos methyl	azinphos-methyl (50.0)	1.5 kg	\$ 41.76
		15 kg	\$390.60

Ispray carbaryl 80 W	carbaryl (80.0)	1.5 kg	\$ 28.92
Caterkill 60	fenitrothion (60.0)	15 kg	\$267.45
		5 litre	\$ 85.00
		20 litre	\$320.00
Decis 2.5 EC	deltamethrin (2.5)	1 litre	\$ 66.29
		5 litre	\$298.25
Diazinon 50W	diazinon (50.0)	2 kg	\$ 41.76
Dibrom 8	naled (87.0)	1 litre	\$ 26.60
Dichlorvos	dichlorvos (100.0)	1 litre	\$ 28.63
100E		5 litre	\$ 26.25
Ekatin	thiometon (25.0)	5 litre	\$120.30
Furadan 75 W	carbofuran (75.0)	500 g	\$ 26.51
Ispray Lindane 50 W	lindane (50.0)	2 kg	\$ 42.81
Malathion 25 W	maldison (25.0)	2 kg	\$ 16.26
Malathion	maldison (50.0)	5 litre	\$ 45.65
50 EC		20 litre	\$162.60
Orthene 75	acephate (25.0)	500 g	\$ 26.25
		5 kg	\$492.80
Temik 10G	aldicarb (10.0)	15 kg	\$259.35
Thiodan 35 EC	endosulfan (35.0)	1 litre	\$ 22.10
		5 litre	\$ 92.55
		20 litre	\$362.60

IVON WATKINS-DOW

Bactospeine WP		2 kg	\$ 95.80
Bikartol anti-sprout agent		20 kg	\$ 58.40
Cropsure 20-G		15 kg	\$ 86.25
Dyzol 80EC	diazinon (80.0)	5 litre	\$ 97.75
		20 litre	\$381.00
Ethrel 48 plant growth regulator		1 litre	\$ 82.10
Lorsban 40EC	chlorpyrifos (40.0)	2 litre	\$ 67.80
		5 litre	\$165.40
		20 litre	\$630.00
Lorsban 50W	chlorpyrifos (50.0)	2 kg	\$ 79.90
Nexion 40EC	bromophos (40.0)	5 litre	\$ 94.85
		20 litre	\$368.20
Plictran 600F	miticide	2 litre	\$208.50
Protek S		20 litre	\$384.80
Topsin M-4A		5 litre	\$129.75

SHELL

Bildrin conc.	dicrotophos (103.0)	2.5 litre	\$ 89.68
Counter 20 G	terbufos (20.0)	15 kg	\$147.90
		20 kg	\$197.20
DDT conc.	DDT (20.0)	5 litre	\$ 36.05
		20 litre	\$139.40

Diazinon 20G	diazinon (20.0)	25 kg	\$178.50
Diazinon 80 EC	diazinon (80.0)	5 litre	\$117.05
		20 litre	\$446.00
Dieldrite 25	dieldrin (25.0)	20 litre	\$281.60
Lindane pellets	lindane (20.0)	25 kg	\$191.25
Sumicidin 10	fenvalerate (10.0)	1 litre	\$ 42.21
		2.5 litre	\$ 99.80
		20 litre	\$764.60
Sumicidin 20 WP	fenvalerate (20.0)	2 kg	\$168.00
		7.5 kg pail	\$625.00
Vapona conc.	dichlorvos (108.0)	1 litre	\$ 25.58
		2.5 litre	\$ 58.55
Verthion BC	fenitrothion (60.0)	5 litre	\$ 81.00
		20 litre	\$305.00
Verthion pellets		25 kg	\$121.25

Oil Sprays

Sunspray		5 litre	\$ 22.50
		20 litre	\$ 77.00
		205 litre	\$762.60

YATES

Apollo 50 SC	clofentezine (50.0)	2 litre	\$348.00
Diazinon 80	diazinon (80.0)	5 litre	\$125.00
Maldison 50 EC	maldison (50.0)	5 litre	\$ 43.00
		20 litre	\$154.00

BASF

Malix 35.5 EC	endosulfan (35.5)	1 litre	\$ 23.43
		5 litre	\$ 98.30
		20 litre	\$383.60
Perfeththion S	dimethoale (50.0)	1 litre	\$ 19.71
		5 litre	\$429.50

BAYER

Dasanit 5G	fensulfothion (5.0)	25 kg	\$ 121.00
Disyton 10G	disolfoton (10.0)	15 kg	\$ 78.04

2.12.3 Fungicides

ICI NEWZEALAND LTD

Milcurb	buririmate (25.0)	5 litre	\$ 71.50
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<u>SHELL</u>			
Kocide 101	cupric hydroxide (50.0)	1.8 kg	\$ 21.75
		10 kg	\$106.40
Syllit 40S	dodine (40.0)	5 litre	\$ 76.65
		20 litre	\$301.60

MAY & BAKER

Mistral		1 litre	\$ 49.40
		5 litre	\$237.50

BASF

Calxin	tridemorph (75.0)	5 litre	\$204.05
		20 litre	\$805.20
Corbel	fenpropimorph (75.0)	5 litre	\$238.75

BAYER

Bayleton 125	tridimefon (25.0)	5 litre	\$ 362.34
Bayleton WP	carbendazim plus triadimefon (25.0)	2 kg	\$ 192.00

FARMERS FERTILISER LTD

Sportak 45 EC	prochloraz (45.0)	5 litre	\$244.00
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2.12.4 Wetting, Spreading and Marking Agents

BASF

Citowett	alkylaryl polyglycol	1 litre	\$ 10.36
(sticker/spread)	ether	5 litre	\$ 45.35
		20 litre	\$170.40

FARMERS FERTILISER

Landmark (dye, liquid marker)		1 litre	\$ 32.30
		5 litre	\$153.44
		20 litre	\$583.00
Ortho Spray sticker		5 litre	\$ 75.50
		20 litre	\$295.20
Supawet Landmark		5 litre	\$ 46.90
		20 litre	\$177.00

ICI NEW ZEALAND

Agral LN wetting agent		5 litre	\$ 13.15
		20 litre	\$ 42.40
Contact wetter, sticker spreader		1 litre	\$ 8.16
		5 litre	\$ 32.75
		20 litre	\$126.00

Triton X45	2 litre	\$ 21.97
	5 litre	\$ 52.64
	20 litre	\$201.39

MAY & BAKER

Emulsifier X-45	2 litre	\$ 21.50
(Use with Asulox)	5 litre	\$ 51.50
	20 litre	\$195.00

SHELL

Shell Super Spread	5 litre	\$ 13.70
	20 litre	\$ 48.80
Nalco-trol II	1 litre	\$ 11.99
(Spray additive, reduces drift)	5 litre	\$ 52.75

2.12.5 Rodent Prevention

ICI NEW ZEALAND

Talon (WB), rat poison	500 g	\$ 8.25
	2.5 kg	\$34.50

CYCLONE

Rat Trap	- rail freight paid	\$21.59
Opposum Trap	- rail freight paid	\$23.56

2.13 CLOTHING AND SAFETY EQUIPMENT

BELL-BOOTH

Apron	- Hay	\$46.46
	- Dairyshed with pocket	\$19.06
	without pocket	\$20.38
Leggings	- Pull on	\$42.31
	- Side Opening	\$59.74
	- Pull on with leather facing	\$33.34
	- Side Opening without leather facing	\$53.07
Goggles	- Reygard welding	\$ 6.80
Motor Bike Mitts	- Vinyl	\$16.29
Therm-O-Sox, standard		\$ 9.70
Therm-O-Sox, Ski Hi		\$10.50

<u>DINKUM</u>	- Nielsen Back Supporting Harness	\$198.00
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YATES

Gloves Tufguy	\$18.91
Gloves Ranch Tan	\$25.98
Gloves Lumberjack	\$25.43

FRUITFED LTD

Respirators - Goodman	\$35.00
'Agriculture'	
Single Filter	\$25.78
Double Filter	\$34.95
Hood	\$74.80
Filters	\$ 6.90

WORMALD

Gloves	
Knitted Gloves	\$ 1.51 - \$ 4.08
Fabric Glove	\$ 4.86 - \$ 7.45
Fabric and Leather Gloves	\$ 8.23 - \$ 9.15
Leather Gloves	\$11.68 - \$20.91
Leather Mitts	\$17.04 - \$20.60
Leather Gauntlets	\$21.03 - \$23.05
P.V.C. Gloves	\$ 5.35 - \$ 8.35
Edmont Gloves	\$ 9.67 - \$24.81
Rubber Gloves	\$ 2.33

Eye Protection

Spectacles	\$11.51 - \$22.09
Goggles	\$ 6.51 - \$ 9.09

AIRSTREAM ANTI-DUST HELMET

Complete with battery	\$773.79
Battery Charger 240 V	\$ 83.60
Wormald Safety Helmet H46	\$ 17.50

Welding Protection

Helmets - Hiderok Lift Up	\$38.50
- Hiderok Fixed Front	\$32.90
Goggles	\$ 9.81 - \$21.50
Face Shield - inner handle	\$32.34
- outer handle	\$27.31
See thru welding curtain	\$35.50
Gloves	\$21.03 - \$38.07

Aprons

Hay	\$33.85
Dairy Shed with pocket	\$18.50

Wormald Silencer Ear Muffs Grade II	\$17.47
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Dust Mask

Dust guard Masks Single	\$ 2.22
Filters Packet of 20	\$ 4.94

Respirators

Agriculture Double Filter	\$34.95
Hood	\$11.05
Filters	\$12.48

Overalls

Zip Comb Sizes 3 - 8	\$41.62 - \$44.50
Sizes 9 - 10	\$46.06 - \$47.95
Bib and Brace	\$36.00 - \$38.96

Leggings

Oilskin	\$30.00
P.V.C. Coated	\$27.03

Cold/Wet Weather Gear

Parkas - Oilskin	\$55.70
P.V.C. Coated	\$49.36
Swandri Zip Front Jacket	\$112.99 - \$116.62
Bushshirt	\$ 98.58 - \$102.25

Footwear

Marathon Knee (Rubber boots)	\$67.00
Perth Knee 6 - 12	\$50.70
White and Bata Workmate	\$36.57
White and Black	\$40.17
Safety Boots	\$71.69 - \$139.35

LINE 7

Heavy P.V.C. Farmers Jacket	\$ 69.00
Heavy P.V.C. Overtrouser (elastic waist)	\$ 31.00
Heavy P.V.C. Bib Overtrouser	\$ 39.50
Shed Apron	\$ 24.00
Heavy PVC Contractors Coat (unlined)	\$ 47.50
PVC "Comfort" Jacket (lightweight)	\$ 43.50
PVC "Comfort" Overtrouser (lightweight)	\$ 26.50

2.14 FERTILISER AND LIME

2.14.1 Fertiliser

RAVENSDOWN FERTILISER CO-OPERATIVE LTD (ex Works Christchurch)

AS AT 14 OCTOBER 1986 N.B. RETAIL PRICE LIST

N	P	K	S		Price per tonne	
					Bulk	Bagged
0	9	0	11	Super	181.48	202.28
0	9	0	11	Super (Drilling Grade)	181.48	202.28
0	10	0	8	Longer Life Supr Spcal Mix	178.88	199.68
0	9	0	11	Boron Super	203.84	224.64
0	9	0	11	Cobalt Super	214.34	235.14
0	9	0	11	Molybdate Super 500G	193.54	214.34
0	9	0	11	Molybdate Super 250g	189.70	210.50
0	7	0	9	Legume Est. Fertiliser	178.05	198.85
0	8	8	9	15% Potash Super	204.36	225.16
0	6	15	7	30% Potash Super	222.98	243.78
0	6	15	8	30% Potash Boron Super	240.34	261.14
0	6	15	7	Potash Molybdate Super	230.88	251.68
12	5	14	3	Nitrophoska blue TE	-	657.18
0	8	0	27	Molybdate Sulp Super Extra	230.15	250.95
0	8	0	19	Molybdate Sulphur Super	211.85	232.65
0	5	25	5	50% Potash Boron Super	265.30	286.10
0	8	0	19	Sulphur Super	203.94	224.74
0	8	0	27	Sulphur Super Extra	222.25	243.05
0	6	11	15	22% Potash Sulphur Super	227.24	248.04
0	5	15	15	30% Potash Sulphur Super	241.23	262.08
0	8	0	15	Westland Pakihi Starter	224.12	244.92
6	7	0	15	Nitrogen Super	196.04	216.84
6	5	5	14	Multicrop	208.52	229.32
2	8	0	12	Turnip and Rape	189.18	209.98
6	5	5	14	Multicrop with Boron	214.24	235.04
18	20	0	0	Cropmaster DAP	451.67	477.67
20	10	0	12	Cropmaster 20	345.70	371.70
15	10	10	7	Cropmaster 15	362.23	388.23
13	14	15	0	Cropmaster 13	414.54	440.54
46	0	0	0	N.Rich Urea (1 tonne)	-	373.57
20	0	0	0	Liquid Nitrogen	224.12	-
21	0	0	24	Ammonium Sulphate - Std	216.01	236.81
				- Granulated	231.50	252.30
0	0	50	0	Potassium Chloride - Std	305.76	326.56
				- Granulated	314.08	334.88
0	0	40	17	Potassium Sulphate	-	843.23

12	10	10	1	Nitrophoska	-	497.12
12	5	14	6	Nitrophoska Blue Special	-	726.96
15	7	5	0	Nitrophoska Yellow	-	751.92
0	9	0	11	Selenium Super	194.79	-

Selenium fertilisers being restricted poisons are available for sale only to commercial users. Available in bulk only.

***** DO NOT SOW BORATED FERTILISERS IN CONTACT WITH SEED.**

AMMO-PHOS FERTILISER

Above is trading name of EAST COAST FERTILISERS.

Now have a regional pricing policy and farmers should ascertain prices in their area by contacting usual supplier.

Prices effective from Nett Per Tonne ex Napier, 1 October 1985.

N	P	K	S		Citric P %	Bulk \$	Bag \$
				<u>Manufactured</u>			
0	10	0	12	Superphosphate	8.0	175.00	205.00
0	10	0	12	Cobalt Super	8.0	187.10	217.10
0	10	0	12	Copper Super	7.8	213.00	243.00
0	9	9	11	Magnesium Super	7.4	216.70	246.70
0	10	0	12	Molybdenum Super	8.0	182.50	212.50
0	10	0	12	Selenium Super	8.0	189.30	219.30
0	9	0	21	Sulfos	7.2	215.00	245.00
0	10	0	12	Boron Super	7.8	231.40	261.40
0	9	7	10	15% Potash Super	6.8	210.00	240.00
0	7	15	8	30% Potash Super	5.6	225.00	255.00
0	5	25	6	50% Potash Super	4.0	245.00	275.00
7	7	0	15	Nitrogen Super	5.3	235.00	265.00
7	6	7	14	Hi-Gro	4.4	215.00	245.00
46	0	0	0	N Rich Urea	-	-	405.60
20	0	0	0	Liquid Nitrogen 20	-	33.35 c/litre	
				<u>Imported</u>			
12	10	10	8	Ammo Phos	10.0	495.00	525.00
10	22	0	2	Ammo Phos	22.0	560.00	590.00
9	18	7	2	Ammo Phos	18.0	545.00	575.00
8	14	13	2	Ammo Phos	14.0	520.00	550.00
8	10	20	3	Ammo Phos	10.0	495.00	525.00
16	6	6	14	Ammo Phos	6.0	390.00	420.00
16	11	0	3	Ammo Phos	11.0	390.00	420.00
13	6	12	12	Ammo Phos	6.0	390.00	420.00
18	20	0	12	Ammo Phos	20.0	500.00	530.00

21	0	0	24	Amsulf	-	275.00	305.00
0	0	0	50	Muriate (Chloride)	-	310.00	340.20

<u>Foliar Fertiliser</u>	<u>Unit</u>	<u>Price</u>
Wuxal Calcium	10 litre	\$ 56.00
	25 litre	\$156.25
Wuxal L/V	20 litre	\$122.20

BELL-BOOTH

<u>Foliar Fertiliser</u>		
Maxicrop Farm Concentrate	20 litre	\$124.00
	200 litre	\$906.00

BASF

<u>Foliar Fertiliser</u>		
Petrilon 13% Fe (Iron Chelate)	2 kg	\$ 35.80
	25 kg	\$417.00
Petrilon Combi One		
Chelated Trace Elements	2 kg	\$ 50.56
	25 kg	\$580.50
Petrilon Combi Two		
Chelated Trace Elements	2 kg	\$ 49.80
	25 kg	\$564.50

N	P	K	S			
10	2	6	1	Foliar Nitrophoska	5 l	24.25
					20 l	86.00
12	5	26	1	Polyfeed Blue	25 kg	83.75
17	5	10	1	Polyfeed Green	25 kg	83.75
26	5	10	1	Polyfeed Yellow	25 kg	83.75
16	3	10	12	Triabon	25 kg	102.50

2.14 2 Lime

Cost per tonne ex quarry. (North Canterbury)

Whiterock Lime Co. Ltd

Dried Lime	per tonne	\$12.00
Blend Lime	per tonne	\$10.00
Calcined Lime (Burnt Lime)	per tonne	\$150.00

The cost is influenced considerably by the distance from source therefore the cost of lime also differs.

2.15 DRAINAGE, IRRIGATION AND WATER SUPPLY

2.15.1 Drainage Materials

Field Tiles

BOYES

100 mm	\$2.20
150 mm	\$4.40
250 mm	\$11.00

Novaflo/Novacoil Pipe

A.H.I.

<u>Diameter</u>	<u>Region</u>	<u>Coil Length Available</u>	<u>Price/m</u>
65 mm	5	30 m, 150 m	\$ 1.33
	6	30 m, 150 m	\$ 1.16
110 mm	5	30 m, 100 m	\$ 2.17
	6	30 m, 100 m	\$ 1.95
160 mm	5	40 m	\$ 4.24
	6	45 m	\$ 3.76

- * Regions: 5 - Those South Island areas north of a line drawn from Hampden to Wanaka.
 6 - Those South Island areas south of and inclusive of Wanaka and Hampden.

Concrete Culvert Pipes

MCKENDRYS

		<u>Weight</u>		<u>GST</u>	<u>Total</u>
150 mm	6" x 900	59 kg	\$16.50	\$1.65	\$18.15
225 mm	9" x 900	73 kg	\$19.80	\$1.98	\$21.78
305 mm	12" x 900	100 kg	\$25.85	\$2.58	\$28.43
375 mm	15" x 900	130 kg	\$30.00	\$3.00	\$33.00
450 mm	18" x 900	160 kg	\$33.45	\$3.34	\$36.79
610 mm	24" x 900	250 kg	\$44.95	\$4.49	\$49.44
750 mm	30" x 900	275 kg	\$57.20	\$5.72	\$62.92
900 mm	36" x 900	300 kg	\$76.45	\$7.64	\$84.09
305 mm	12" x 1.200	130 kg	\$39.60	\$3.96	\$43.56

Backfill Shingle

(Per cubic metre) \$12 to \$14 in the trench.

One cubic metre backfills approximately 15 metres of drain.

2.15.2 Septic Tanks

HUMES

2730 litres plus fittings	\$525.71
3300 litres	\$805.71

2.15.3 Border Dyke Irrigation

1. Earthworks

Average cost for Canterbury conditions would be \$750 to \$850/ha.

However the range would be \$400/ha (Mid Canterbury) to \$1500/ha (North Canterbury/Waiau)

This costs includes:

- All levelling
- Construction of levees
- Construction of supply and head races

2. Structures

Concrete Dams

Depends on flow rate of water and will vary from \$125 each (230 litres/sec) to \$177 (350 litres/sec).

Sills

Standard sills (2.5 m boards) cost between \$25 and \$35 each.

There are various other designs which would generally be more expensive.

Weirs

Vary from \$138 (cheap - not generally recommended) to \$330 each.

Access Crossings

Consisting of 2 pipes plus head walls

450 mm diameter pipe	\$ 600.00
600 mm diameter pipe	\$1080.00
750 mm diameter pipe	\$1220.00

2.15.4 Spray Irrigation System Costing

(Contributed by Mr. L.N. Austin, Austin and Jones Irrigation Systems, 1986).

Introduction

Spray Irrigation systems are tailor made to fit the property and the farmer and are not "off the rack" schemes etc.

There are many different ways of irrigating a property depending on:

- The farm to be irrigated
- Crop type
- Soil type

and - Individual farmer operating the system

1. Costs per Hectare

These will vary considerably depending on soil types and water application.

Examples

A. Medium/Heavy Soil Property of 150 ha.

- Flow of .35 litres/second/ha
- Water at continuous flow from community supply turn-out
- Incorporating a Surface Centrifugal Pump Unit

Irrigator	\$50,925
Pipe	\$89,095
Pump	\$ 6,786
Electrical	\$ 2,750
Connection Charge	\$ 2,050
Installation	\$ 5,852
Hydrants	\$ 9,880
Shed	\$ 450
	<u>\$167,248</u>

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Cost per ha \$ 1,115

B. Light/Medium Soil Property of 200 ha

- Flow of .35 litres/second/ha
- Water from Irrigation Bore of 300 mm x 100 metres depth
- Incorporating a Submersible Pump Unit

2 Irrigators	\$104,220
Pipe	\$105,500
Pump	\$ 30,938
Electrical	\$ 9,020
Connection Charges	\$ 8,413
Hydrants	\$ 11,700
Installation	\$ 6,930
Well Drilling	\$ 26,500
Screen	\$ 1,350
Rising Column	\$ 5,698
Pump Shed	\$ 450
	<u>\$305,021</u>

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Cost per ha \$ 1,525

2. Running Costs

As an example running costs are based on 22 hour/day running time of plants.

Example A - 40 kW @ 6.5c/kW hour operating

Example B - 100 kW @ 6.5c/kW hour operating

3. Pumping Units

Today the majority of irrigation units are electrically operated.

Should a price be required on Diesel or PTO drive pumps refer to AUSTIN & JONES IRRIGATION SYSTEMS LTD for these price [or prices in Section 2.15.10 in this manual]

4. Mainlines

Depending on pressure requirements of irrigator and elevation levels of property 2-Pressure ratings of pipe are incorporated.

Class B for Spraylines, Rotor Rainers Low Pressure Booms

Class C for Travelling Irrigators, Hard Hose Irrigators

Prices of mainliners including P.V.C. pipe, Hydrants and Installation per metre:

<u>Diameter</u>	<u>Class B</u>	<u>Class C</u>
100 mm	9.10 c	10.50 c
125 mm	11.20 c	14.20 c
150 mm	14.50 c	19.00 c
200 mm	20.75 c	27.85 c

5. Irrigators

As mentioned there are over 30 different types and sizes of irrigating devices on the market (apart from hand shift spray- lines). The matching of these to a particular property depends on various factors including:

- Water Availability
- Area to Irrigate
- Soil Types
- Crops etc to Irrigate
- Most importantly, Farmer Input

Further information on specific detail of the above can be obtained by contacting AUSTIN AND JONES IRRIGATION SYSTEMS, and by reading the following section.

2.15.5 Irrigator Models and Equipment

BRIGGS IRRIGATION LIMITED

Travelling Irrigators

Briggs Model 250 Roto Rainer, 200m x 5 inch Hose and Trailer	\$50,295.00
Briggs Model 125 Roto Rainer, 200m x 4 1/2 inch Hose and Trailer	\$39,539.00
Briggs Model 80 Roto Rainer with 200m x 3 1/2 inch Hose and Trailer	\$23,500.00
Briggs Model 50 Linear Boom with 200m x 3 inch Hose and Trailer	\$22,000.00

Briggs Model 20 Roto Rainer with 150m x 2 1/2 inch Hose and Trailer	\$10,100.00
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Briggs Model 10 Roto Rainer with 100m x 2 inch Hose and Trailer	\$3,900.00
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SOUTHERN CROSS MACHINERY

Note: Prices include GST

Travelling Irrigator

PCC (Model 30)	45 mm Hose	\$6957.50
Powerwind	50 mm Hose	\$8118.00

TCD 2,000	65 mm x 150 m	\$14,500.00
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TCE 3,000	75 mm x 150 m	\$21,160.00
	88 mm x 150 m	\$23,020.00

TCL 7,500	100 mm x 200 mm	\$34,170.00
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TCM 900	114 mm x 200 mm	\$37,010.00
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Linear Boom	125 mm x 200 mm	\$48,950.00
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Irrigator complete with sprinklers, hose (Angus), hose ends, starting coupling.

Aluminium Tube

50 mm x 7.5 m	\$ 49.00
75 mm x 9.0 m	\$ 86.00
100 mm x 9.0 m	\$111.00

Couplings complete with Vee Seals

50 mm	\$32.00
75 mm	\$ 38.50
100 mm	\$ 51.00

Sprinklers

Naan 223/96	5.6 nozzle 3/4" Male	\$ 26.50
254/96	7.0 nozzle 1" Female	\$ 40.00
5033	4.8 nozzle 3/4" Male	\$ 15.50

Pump Units Complete With Motor (Starline)

40 x 32 - 230	(11 kW) 9 lps @ 70m	\$3,740.00
65 x 50 - 230	(18.5 kW) 20 lps @ 60m	\$4,297.00
80 x 65 - 230	(30 kW) 28 lps @ 70m	\$4,884.00
80 x 65 - 280	(37 kW) 25 lps @ 90m	\$5,800.00
100 x 80 - 280	(45 kW) 40 lps @ 75m	\$7,030.00

125 x 100 - 280	(75 kW) 65 lps @ 90m	\$8,250.00
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Micro Irrigation

Microjets	\$ 0.36
7102 Mini Sprinkler c/w stake and tube	\$ 3.00

FECO

Baars Irrigation Systems	\$22900
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2.15.6 Remote Control Systems

Radio Control of Pumps for Reservoir Levels (1986 Prices)

Remote Control Systems Ltd supply the following equipment for radio control of pumps according to water level in the reservoir.

Reservoir transmitter and receiver equipment, solar panel powered, differential water level sensing.

\$2300 to \$2650

All aerials, cable and fittings are inclusive, but prices will vary according to aerial requirements and scope of indications required (up to 4 signals).

Radio Control Units

It is now possible to control the pump from the irrigator using a radio controlled system.

Remote Control Systems Ltd can supply the following:

Portable transmitter and receiver	\$1600.00
Machine mounted transmitter and receiver	\$1900.00
End-of-run timer addition	\$ 100.00
Speed sensitive switch addition	\$ 120.00

Aerials, cable, battery, plugs etc., inclusive.

Costs for the radio control system vary over a small range due to the variation in starter circuits.

2.15.7 Irrigation Charges

Charges for irrigation vary depending on the length of time the scheme has been in operation, the size of the scheme, the source of water and the number of farmers participating in the scheme.

The Ministry of Works and Development on behalf of the Minister is responsible for the operation and maintenance of community irrigation schemes. However, in the case of Greenstreet, Loburn and Glenmark Irrigation Schemes, this role has been delegated to the respective county councils.

Water charges for 1986/87 season for community irrigation schemes in Canterbury are as follows:

<u>Scheme</u>	<u>Charges</u>
Ashburton Lyndhurst	\$19.50 per ha
Mayfield Hinds	\$16.50 per ha
Morven Glenavy	\$4.44 per ha for the first 300 mm equivalent depth plus 80.3 cents per 1000 m ³ of extra water.
Valetta	\$12.50 per ha for the first 300 mm depth plus 65 cents per 1000 m ³ of extra water.

Sinking a Well

When a farmer proposes to sink a well for any purpose he must apply to the North Canterbury Catchment Board for a permit to do so.

Water Rights

If it is proposed to take or use water for any purpose other than for domestic or stock, or for fire fighting, application must be made to the Board for a water right.

The Board requires a deposit against its costs of processing and investigating the application to be paid at the time of making application. Final costs are determined by the Board when it considers the application and the applicant will receive either a refund or an account for the difference between his deposit and the Board costs.

As a general guide only, the following costs can be expected for straight forward applications to which there are no objections.

Application Fee	\$30.00
Administration (minimum per application|) (Incl. advertising, staff time in processing application, issuing right.)	\$70.00
Investigation (Generally 4-5 hrs staff time @ \$22.00/hr; including mileage, travel time, on-site investigation preparation of reports)	\$88.00 - \$110.00

Schedule of Water Right Application Fees

- Deposits Against Costs

Application for a right to:

Replace a previous right which had been investigated and been granted within 2 years of the expiry date, or had been monitored for compliance and impact on the water resource immediately prior to expiry, and no field investigation is required.

\$100.00

Application for a right to:

Dam (3 metre high dam, stopbank)

Divert (minor within property diversion)

Take from surface water (for irrigation, small community water supply, dairy shed washing, small industry supply)

Discharge to groundwater (from a single domestic septic tank)

Discharge stormwater (from 5 hectares urban land)

(rural land drainage water from 20 hectares)

Use (usually associated with multiple rights)

\$200.00

Application for a right to:

Dam (3 metre high dam, major stopbank)

Divert (whole stream or major proportion of flow, river draining works etc.)

Take from surface water (community irrigation schemes, community water supply)

Take from groundwater (for irrigation, community water supply)

Discharge of waste or water containing waste to water or water containing waste to land (cooling water, major stormwater, land drainage water, dairy, multiple rights eg. dam, divert, take, discharge eg. for irrigation scheme)

\$300.00

Special Category:

Industrial complex multiple rights, community sewage schemes, multiple rights for disposal of septic tank effluent within subdivision, major irrigation schemes

\$500.00

This fee and deposit is lodged with the Board to enable an initial inspection and preliminary report upon which a further deposit against investigations will be based, such deposit being reached in discussion with and by resolution of the Board.

2.15.8 Stock Water Supply Charges

Community Water Supply Schemes

Here the cost to the farmer varies, so we have taken the Malvern County Water Schemes. These charges range from \$26.25 per unit (1000l/day) to \$73.50/unit (including GST).

County Stock Water Races

The following table shows the charges made by the Paparua County Council.

Stock Water - Area Charges

<u>Area (ha)</u>	<u>Charges</u>
Under 0.5 ha	\$ 32.03 plus
0.5 - 8 ha	\$ 36.83 plus 66.99c per additional .5 ha
8 - 40 ha	\$ 41.13 plus \$1.54 per additional .5 ha
40 - 80 ha	\$123.26 plus \$1.3864 per additional .5 ha
80 - 121 ha	\$234.17 plus \$1.2326 per additional .5 ha
121 - 161 ha	\$335.56 plus \$1.0784 per additional .5 ha
161 - 202 ha	\$421.66 plus \$0.9245 per additional .5 ha
202 - 242 ha	\$497.93 plus \$0.7704 per additional .5 ha
242 - 283 ha	\$559.25 plus \$0.6162 per additional .5 ha
283 - 323 ha	\$610.39 plus \$0.4622 per additional .5 ha
323 - 364 ha	\$646.90 plus \$0.3082 per additional .5 ha
364 - 404 ha	\$672.93 plus \$0.1541 per additional .5 ha
Over 404 ha	\$684.65 plus \$0.1284 per additional .5 ha

2.15.9 Well Drilling

MCMILLAN WATER WELLS LTD

2 inch	(45 mm)	Drilled	\$56.00/m
		Driven	\$46.00/m
2 1/2 inch	(60mm)	Drilled	\$62.00/m
		Driven	\$52.00/m
3 inch	(70mm)	Drilled	\$85.00/m
		Driven	\$65.00/m
4 inch	(95mm)	Drilled	\$120.00/m
5 inch	(125mm)	\$130/m stainless steel screen	\$660.00/m
6 inch	(150mm)	\$160/m stainless steel screen	\$720.00/m
8 inch	(200mm)	\$190/m stainless steel screen	\$735.00/m
9 inch	(225mm)	\$200/m stainless steel screen	\$900.00/m
10 inch	(250mm)	\$220/m stainless steel screen	\$1125.00/m
12 inch	(300mm)	\$265/m stainless steel screen	\$1350.00/m
16 inch	(395mm)	\$330/m stainless steel screen	\$1635.00/m

Developing and test pumping for irrigation well only \$65.00/hr

2.15.10 Pumps

D.MCL. WALLACE LTD

Powerflo Pumps and Pressure Outfits

Model A	With Bracket and Drive	\$1318.00
	75 Gallon Pressure Outfit	\$2256.00
	90 Gallon Pressure Outfit	\$2314.00
	108 Gallon Pressure Outfit	\$2366.70

Turbine Pumps

Turboflo Pumps and Pressure Outfits

3/4" Turboflo with 1/2 hp 1 Ph Elec Motor	\$434.10
33 Gallon Pressure Outfit	\$1144.30
1" Turboflo with 3/4 hp 1 Ph Elec Motor	\$446.60
3/4" Turboflo 33 Gallon Pressure Unit 3/4hp	\$1214.00

Centrifugal Pumps - Dynajet Motor Mounted

Dynajet Model	35.4 hp with 1" suction 3/4" delivery	\$687.50
	50.5 hp with 1" suction 3/4" delivery	\$812.50
	65.8 hp with 1 1/4" suction 1" delivery	\$784.10
	70.8 hp with 1 1/4" suction 1" delivery	\$886.40
	90.3 hp with 1 1/4" suction 1" delivery	\$1153.00

Dynaflor Model

5100	.4 hp with 1" suction 1" delivery	\$403.50
5130	.84 hp with 1" suction 1" delivery	\$426.20
6200	1.3 hp with 1 1/2" suction 1 1/4" del.	\$545.50

Drainage Pumps

H104W	\$368.00
H180D	\$479.70
H116D	\$540.00
H120D	\$1268.50
H123W	\$1543.90
H108WA	\$412.90
H104WA	\$484.40
H123WA	\$1478.10

608W	\$586.40
616W	\$637.00
Comet Pump	\$626.40
H718 WHD	\$865.60

2.15.11 Water Supply Costs

P.V.C. Pressure Pipe

AHI

Note: Prices include GST

Gold Ribbon Pipe, 90m Head, 130 psi

<u>Diameter</u>	<u>Coil Size</u>				
	<u>25 m</u>	<u>50 m</u>	<u>100 m</u>	<u>150 m</u>	<u>200 m</u>
15 mm	\$ 13.60	\$ 25.99	\$ 49.48	\$ 74.24	\$ 98.97
20 mm	\$ 22.71	\$ 43.33	\$ 82.55	\$123.83	\$165.09
25 mm	-	\$ 65.35	\$124.45	\$186.68	\$248.89
32 mm	-	\$ 96.09	\$183.03	\$274.55	-
40 mm	-	\$129.25	\$246.20	\$369.29	-
50 mm	-	\$226.36	\$431.15	\$646.72	-

Class B PVC Mainsystem for Horticulture

Working pressure 60m 600kPa

32 mm	per 100 m including GST	\$143.80
40 mm	per 100 m including GST	\$170.30
50 mm	per 100 m including GST	\$239.92
65 mm	per 100 m including GST	\$327.05
80 mm	per 100 m including GST	\$520.07

Sleeve Float Values

20 mm Valve	(Straight Arm)	\$16.08
	(Bent Arm)	\$16.08
25 mm Valve	(Straight Arm)	\$16.42
	(Straight Arm)	\$16.42
Straight Arm only		\$3.68
Bent Arm only		\$3.89

Precision Value:

15 mm Gate Valve F/F	\$11.52
20 mm Gate Valve F/F	\$14.33
25 mm Gate Valve F/F	\$32.77
15 mm Shop Valve F/F	\$11.77
20 mm Shop Valve F/F	\$14.97

Self tapping angle ferrule	- male thread	\$16.39
	- female thread	\$14.78

Single Z joint socket	- 50 mm	\$ 9.38
	- 80 mm	\$13.46
	- 100 mm	\$19.27
	- 190 mm	\$58.97

Double Z joint socket	- 50 mm	\$12.84
	- 80 mm	\$20.58
	- 125 mm	\$40.93
	- 190 mm	\$86.55

2.15.12 Well Liners

HUMES

600 mm Diameter (per metre rate)	\$ 57.11
750 mm Diameter (per metre rate)	\$ 91.28
900 mm Diameter (per metre rate)	\$121.81
1050 mm Diameter (per metre rate)	\$183.34

2.15.13 Concrete Water Troughs

MCKENDRY'S

		<u>Price</u>	<u>GST</u>	<u>Total</u>
Dog trough	12" x 6"	\$ 7.00	\$ 0.70	\$ 7.70
Calf trough	23" x 15" x 9"	\$ 25.00	\$ 2.50	\$ 27.50
Weena trough	30" x 8" x 4"	\$ 15.00	\$ 1.50	\$ 16.50
Pig trough	3' x 16" x 9"	\$ 35.00	\$ 3.50	\$ 38.50
	4'6" x 16" x 9"	\$ 40.00	\$ 4.00	\$ 44.00
Round trough	38" diam x 13"	\$ 68.00	\$ 6.80	\$ 74.80
	4'6" diam x 15"	\$ 86.00	\$ 8.60	\$ 94.60
	6'4" diam x 15"	\$120.00	\$12.00	\$132.00
	5'4" x 25 1/2"	\$136.00	\$13.60	\$149.60
Oblong trough	6' x 19" x 14"	\$ 68.00	\$ 6.80	\$ 74.80
	7' x 21" x 17"	\$ 84.00	\$ 8.40	\$ 92.40
	6' x 27" x 12"	\$ 68.00	\$ 6.80	\$ 74.80
	9' x 25" x 18 1/2"	\$120.00	\$12.00	\$132.00

HUMES

	<u>Gallons</u>	<u>Height (mm)</u>	
Circular:			
CB500	110	380	\$128.82
CB750	165	380	\$181.20
CB1000	220	600	\$201.93
CB1500	330	600	\$241.38
CB2500	550	600	\$348.15
Rectangular:			
RB300	66	380	\$109.78
RB400	90	380	\$140.42

2.15.14 Tanks

Concrete

MCKENDRY'S

<u>Capacity</u>	<u>Diameter</u>	<u>Height</u>	<u>Weight</u>	<u>Price</u>	<u>GST</u>	<u>Total</u>
1820 l	1.42 m	1.30 m	0.81 t	\$ 435.00	\$ 43.50	\$ 478.00
3185 l	1.80 m	1.30 m	1.27 t	\$ 580.00	\$ 58.00	\$ 638.00
4450 l	1.80 m	2.10 m	1.52 t	\$ 640.00	\$ 64.00	\$ 704.00
9100 l	2.70 m	2.40 m	4.75 t	\$ 966.00	\$ 96.60	\$1062.00
13650 l	2.82 m	2.80 m	5.08 t	\$1190.00	\$119.00	\$1309.00
25025 l	3.50 m	3.50 m	8.13 t	\$1530.00	\$153.00	\$1683.00

HUMES

<u>Litres</u>	<u>Gallons</u>	<u>Diameter (m)</u>	<u>Height (m)</u>	<u>Price</u>
1820	400	1.42	1.30	\$ 475.81
2730	600	1.68	1.37	\$ 673.09
3640	800	1.83	1.45	\$ 777.54
4550	1000	1.83	1.91	\$ 812.35
9100	2000	2.82	1.83	\$1276.55
13650	3000	2.82	2.44	\$1508.65
18200	4000	3.43	2.44	\$1740.75
22750	5000	3.43	2.74	\$1914.38

Timber Tanks

MCALPINES

<u>Type</u>	<u>Capacity</u> (gallons)	<u>Polythene lined</u> \$	<u>Butynol Lined</u> \$
Header Tank	250	\$ 557.70	-
Header Tank	500	\$ 810.00	-
Header Tank	1000	\$ 982.00	-
A6	2500	\$2029.50	\$2780.80
A5	5000	\$2899.60	\$4043.60

2.15.15 Valves and Floats

BELL-BOOTH

4 1/2" Dolphin Float		\$ 2.34
6" Dolphin Float		\$ 3.78
Full flow trough valves	3/4" x 69	\$21.66
	3/4" x 72	\$23.48
Hi Low trough valves	1/2" x 220	\$13.02

2.16 SHELTER AND FARM FORESTRY LABOUR COSTS

2.16.1 Shelter Plants

The prices shown below are the approximate cost per 100 for trees commonly grown on the farm. The price does not include planting.

HALKETTS NURSERY

Pinus Radiata	1 year	\$ 14.00 per 100
	1 year elite	\$96.00 per 1000
	1 1/2 year	\$16.00 per 100/\$110 per 1000
	1 1/2 year elite	\$17.00 per 100/\$118 per 1000
	2 year	\$18.00 per 100/\$125 per 1000
	2 year hedging grade	\$ 15.00 per 100
Muricata	2 year	\$7.50 per 10/\$40 per 100
Coulterii		\$11.00 per 10/\$96 per 100
Nigra	2 year	\$35.00 per 100/\$240 per 1000
	3 year	\$42.00 per 100/\$290 per 1000
Patula		\$11.00 per 10/\$40 per 100
Pinaster		\$7.50 per 10/\$40 per 100
Ponderosa		\$7.50 per 10
Arizonica		\$11.00 per 100/\$96 per 1000
Macrocarpa		\$7.50 per 10/\$50 per 100
Poplar- all cultivars		\$8.00 per 10/\$20 per 50/\$28 per 100
Douglas Fir/Oregon	2 year	\$40 per 100/\$300 per 1000
	3 year	\$50 per 100/\$350 per 1000
Cedrus deodara		\$63.00 per 100
Eucalyptus- all cultivars		\$11 per 10/\$96 per 100/\$7.50 per 10
Willows - all cultivars		\$8 per 10/\$20 per 50/\$28 per 50
Acer Negundo (Box Elder)		\$7.50 each \$65.00 per 10
Alnus Glutinosa (Black Alder)		\$6.50 each \$55.00 per 10
Betula Pendula (Silver Birch)		\$7.50 each \$65.00 per 10
Cortaderia Selloana (Pampas Grass)		\$8 per 10/\$65.00 per 100
Phormium Tenax (N.Z. Native Flax)		\$11.00 per 10/\$96 per 100
Dononea Viscosa		\$11.00 per 10/\$96 per 100
Ligustrum (Golden Privet)		\$9.00 per 10/\$75 per 100

MILLICHAMPS

Tree lucerne	\$11.00 per 10/\$96 per 100
Wattles (Acacias) - all cultivars	\$11.00 per 10/\$96 per 100
Spruces	\$11.00 per 10/\$96 per 100
Redwoods (Sequoia)	\$3.00 each/\$25 per 10

2.16.2 Farm Forestry Labour Costs

Over a period of years the Forest Service Work Study Units have compiled a set of Labour Value Charts giving the labour content of a range of forest operations.

Over a period of years the Forest Service Work Study Units have compiled a set of Labour Value Charts giving the labour content of a range of forest operations.

In 1980 an attempt was made to update the labour values and also include, where possible, a range of values for varying conditions likely to be met in the field. The range was of necessity "broad- brush" and was divided into five categories:

1. Easy

This represents the best and lowest work content conditions likely to be met on average. Includes those isolated "very easy" situations which are really not typical of a low average.

2. Straight Forward

Slightly more difficult than easy.

3. Moderate

About average conditions but bearing in mind the range of conditions that can be encountered throughout New Zealand.

4. Difficult

Somewhere between "moderate" and "very difficult".

5. Very Difficult

This is an average of high work content situations, being a high average it is implied that there are isolated areas that are more difficult.

The Labour Value Charts were compiled from Forest Service Work Study standards where applicable, and were stated at 80% of target using those standards, ie., the rate expected of a steady, deliberate, unhurried performance of a worker not on incentive but under proper supervision who has been on the job long enough to have obtained reasonable skills.

As an extension of the basic Labour Value Chart the Advisory Services Division of the Forest Service has compiled an Operation Value Chart.

The following figures were compiled in 1985. At the time of printing updated figures were not available but can be obtained from the New Zealand Forest Service from March 1987.

OPERATION VALUE CHART
October 1985

	CONDITION				
Operation	1	2	3	4	5
Felling for land clearing (\$/ha)	263	450	634	821	1006
Hand felling regeneration (\$/ha)	150	313	476	639	802
Hand line cutting (\$/ha)	163	238	313	388	464
Spot spray before planting (\$/ha)	60	103	145	188	230
Hand fertilising (\$/ha)	53	83	113	143	173
Ripping (\$/ha)	80 - 140				
Hand Planting (exotics)					
800 sph (\$/ha)	56	93	129	165	202
1000 sph (\$/ha)	68	108	148	187	227
1200 sph (\$/ha)	79	125	172	218	264
1400 sph (\$/ha)	90	137	183	229	276
1600 sph (\$/ha)	103	153	202	252	301
Hand Planting (Indigenous)					
400 sph (\$/ha)	64	124	184	243	303
600 sph (\$/ha)	88	155	222	289	356
800 sph (\$/ha)	113	185	257	329	401
1000 sph (\$/ha)	135	215	294	374	453
Marram digging (\$/tonne)			119		
Marram hand planting (\$/ha)			250		
Blanking					
200 sph (\$/ha)			25		
400 sph (\$/ha)			44		
600 sph (\$/ha)			63		
800 sph (\$/ha)			81		

Pruning (First lift)	1	2	3	4	5
500 sph (\$/ha)	232	259	287	315	342
600 sph (\$/ha)	278	311	345	378	410
700 sph (\$/ha)	324	363	402	441	480
Pruning (Second lift)					
200 sph (\$/ha)	94	118	142	165	190
300 sph (\$/ha)	141	177	213	249	284
400 sph (\$/ha)	188	236	284	332	379
Pruning (Third lift)					
200 sph (\$/ha)	120	151	182	212	243
300 sph (\$/ha)	179	226	272	318	364
Thin to waste					
400 sph removed (\$/ha)					
(1st thin)	69	89	107	125	145
600 sph removed (\$/ha)	95	118	141	164	186
800 sph removed (\$/ha)	121	150	179	209	238
1000 sph removed (\$/ha)	147	180	217	252	287
1200 sph removed (\$/ha)	173	214	254	295	336
Thin to waste					
200 sph removed (\$/ha)					
(2nd thin)	52	63	72	83	93
400 sph removed (\$/ha)	89	102	116	130	144
600 sph removed (\$/ha)	124	141	156	174	190

Adjustment Factors for all Operations

Washout days

/annum

Travel (km)/day

	<u>Short</u> (14 km)	<u>Norm.</u> (62 km)	<u>Long</u> (138 km)
5	.831	.979	1.215
10	.850	1.000	1.241
15	.870	1.023	1.268

Adjustment Factors for Chainsaw thin-to-waste

Washout days

/annum

	<u>Short (14 km)</u>	<u>Travel (km)/day</u> <u>Norm. (62 km)</u>	<u>Long (138 km)</u>
5	.861	.982	1.777
10	.877	1.000	1.198
15	.893	1.019	1.221

N.B. Distance travelled per day and number of washout days per annum quoted above are all averages.

The Operation Value Chart has been compiled from values obtained by amalgamating the Work Study Chart with a contract cost structure.

The contract cost structure is based on the New Zealand (except Westland) Forestry Workers Award. The cost structure allows the 209 work days, 10 washout days, 5 days spent looking for work, 10 days when no work is available, 11 days statutory holiday, and 16 days annual leave. Boots, overalls, wet weather allowance, tea money, and an insurance cover against sickness, first two-week accident insurance, and bereavement leave is also included.

All Forest Service extension staff were consulted and a range of conditions considered. Travel time and distance, gang size, vehicle hire, accident compensation levy, public liability insurance, equipment allowance and overheads are all recognised within the cost structure.

Other Costs

The costs given in the Operation Value Chart include all the above costs. Additional items such as fertilisers, spray, tree stocks are not included.

Refer to the appropriate sections in this manual for details.

Tree Planting Auger

GALLAGHER

Short auger complete with tip:

	<u>Stony Tip</u>	<u>Plain Tip</u>	<u>Screen Tip</u>
500 mm	\$359	\$359	\$359
600 mm	\$473	\$473	\$473

Auger extension complete with shear bolt

300 mm	\$ 47.00
450 mm	\$ 50.00
600 mm	\$ 56.00

Scraper kit to prevent hole grazing \$ 9.10

2.17 FENCING EQUIPMENT AND MATERIALS

2.17.1 Wire CYCLONE

	<u>Gauge of Wire</u>	<u>Length of 25 kg coil</u>	<u>\$ per coil</u>
Plain Wire	4 mm (No. 8)	253m	\$38.69
	3.55 mm		\$40.70
	3.15 mm	408m	\$41.51
	2.0 mm		\$46.40
	2.5 mm	648m	\$43.85
	1.6 mm		\$50.92
	2.5mm (12.5 H.T.)		\$44.80
Barbed Wire	2.5mm (barbs 75mm)	240m	\$55.81
	1.6mm High Tensile Reversed Twist	500m	\$67.05
Lacing Wire	2mm galvanised	5kg coils	\$11.17
		10kg coils	\$22.34
	1.6mm galvanised	5kg coils	\$12.52
		10kg coils	\$25.04

2.17.2 Posts

HICKSON'S TIMBER IMPREGNATION CO (NZ) LTD

(prices are net retail, ex Ch-Ch yard)

Posts:

Premium	1.8 metre x 150mm S.E.D. minimum	\$8.00
No. 1 Round	1.8 metre x 125mm S.E.D. minimum	\$6.00
No. 2 Round	1.8 metre x 100mm S.E.D. minimum	\$4.75
No. 3 Round	1.8 metre x 75mm S.E.D. minimum	\$3.50
No. 2 1/2 Round	1.8 metre x 150mm sawn face	\$4.40
1/4 - Round	1.8 metre x 90mm sawn faces	\$3.25

Angles:

Round	2.1 metre x 200mm S.E.D. minimum	\$16.00
Round	2.1 metre x 175mm S.E.D. minimum	\$12.50
Round	2.1 metre x 150mm S.E.D. minimum	\$10.00
Round	2.4 metre x 140mm S.E.D. minimum	\$10.00

Strainers:

No. 1 Round	2.4 metre x 200mm S.E.D. minimum	\$19.00
No. 2 Round	2.4 metre x 175mm S.E.D. minimum	\$15.00

No. 3 Round	2.4 metre x 150mm S.E.D. minimum	\$11.50
No. 1 1/2-Round	2.4 metre x 175mm face minimum	\$ 8.50
No. 2 1/2-Round	2.4 metre x 150mm face minimum	\$ 7.00
No. 2 1/2-Round	2.1 metre x 150mm face minimum	\$ 5.50

Stockyards:

No. 1 Round	2.7 metre x 200mm S.E.D. minimum	\$21.00
No. 2 Round	2.7 metre x 175mm S.E.D. minimum	\$17.00
No. 3 Round	2.7 metre x 150mm S.E.D. minimum	\$13.50
No. 1 Round	3.0 metre x 200mm S.E.D. minimum	\$24.00
No. 2 Round	3.0 metre x 175mm S.E.D. minimum	\$19.00
No. 3 Round	3.0 metre x 150mm S.E.D. minimum	\$15.00
No. 1 Round	3.6 metre x 200mm S.E.D. minimum	\$29.00
No. 2 Round	3.6 metre x 175mm S.E.D. minimum	\$23.00
No. 3 Round	3.6 metre x 150mm S.E.D. minimum	\$18.00
No. 2 1/2-Round	2.7 metre x 175mm face minimum	\$ 9.00
No. 3 1/2-Round	2.7 metre x 150mm face minimum	\$ 9.00
No. 2 1/4-Round	3.0 metre x 175mm face minimum	\$12.50

Rails:

1/2-Round	3.6 metre x 125mm face minimum	\$13.75
1/2-Round	4.8 metre x 125mm face minimum	\$21.25
1/2-Round	6.0 metre x 125mm face minimum	\$27.50

Stays/Rounds:

No. 1 Round	2.4 metre x 115mm S.E.D. minimum	\$ 7.25
No. 2 Round	2.4 metre x 90mm S.E.D. minimum	\$ 5.00
No. 3 Round	2.4 metre x 75mm S.E.D. minimum	\$ 3.75
No. 1 Round	2.7 metre x 115mm S.E.D. minimum	\$10.50
No. 2 Round	2.7 metre x 90mm S.E.D. minimum	\$ 8.00
No. 3 Round	2.7 metre x 75mm S.E.D. minimum	\$ 4.25

Haybarn Poles:

Round	3.0 metre x 125mm S.E.D. minimum	\$15.00
Round	3.6 metre x 125mm S.E.D. minimum	\$20.00
Round	4.8 metre x 125mm S.E.D. minimum	\$29.00
Round	6.0 metre x 125mm S.E.D. minimum	\$39.00

STOCKMAN

Posts

1.8 m	small	\$ 4.39
1.8 m	medium	\$ 5.94
1.8 m	large	\$ 8.45

Half Round Posts

1.8 m	small	\$ 2.66
1.8 m	large	\$ 4.66

Quarter Round Posts

1.8 m	large	\$ 2.79
-------	-------	---------

Berry Pole

2.4 m	small	\$ 5.23
-------	-------	---------

Stays

2.4 m	medium	\$ 6.95
-------	--------	---------

2.7 m	medium	\$ 7.65
-------	--------	---------

Deer Posts

2.7 m	large	\$14.30
-------	-------	---------

Strainers

2.1 m	150 mm	\$11.52
-------	--------	---------

2.1 m	175 mm	\$14.58
-------	--------	---------

2.4 m	150 mm	\$12.76
-------	--------	---------

2.4 m	175 mm	\$16.26
-------	--------	---------

2.4 m	200 mm	\$22.25
-------	--------	---------

2.7 m	150 mm	\$14.47
-------	--------	---------

2.7 m	175 mm	\$18.47
-------	--------	---------

2.7 m	200 mm	\$26.13
-------	--------	---------

Half Round Strainers

2.1 m		\$ 7.26
-------	--	---------

2.4 m		\$ 8.58
-------	--	---------

2.7 m		\$ 9.74
-------	--	---------

Poles

3.0 m	small	\$17.59
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3.6 m	small	\$20.57
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4.2 m	small	\$24.44
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4.8 m	small	\$28.22
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5.4 m	small	\$32.74
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6.0 m	small	\$36.60
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3.0 m	medium	\$25.58
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3.6 m	medium	\$29.15
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4.2 m	medium	\$35.86
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4.8 m	medium	\$41.64
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5.4 m	medium	\$47.52
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6.0 m	medium	\$53.46
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3.0 m	large	\$32.62
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3.6 m	large	\$38.72
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4.2 m	large	\$46.64
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4.8 m	large	\$54.18
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5.4 m	large	\$61.93
6.0 m	large	\$70.13

Half Round Rails

3.0	\$11.90
3.6	\$13.36
4.2	\$16.19
4.8	\$18.80
5.4	\$21.62
6.0	\$24.09

Concrete

MCKENDRYS

	Price	GST	Total
Light Square Strainers 6" x 6"	22.25	2.22	24.47
Medium Square Strainers 7" x 7"	26.50	2.65	29.15
Heavy Square Strainers 8" x 8"	34.10	3.41	37.51
Post Stays	12.75	1.27	14.02
Post Stays Blocks	4.50	0.45	4.95

2.17.3 Battens (Tanalised)

CYCLONE

Lightning Fence Droppers

914 mm (36")	\$69.64 per 100
940 mm (37")	\$70.46 per 100
965 mm (38")	\$79.96 per 100
1003 mm (39.5")	\$76.88 per 100

HICKSONS

50 mm x 50 mm	1.12 metre	\$87.00 per 100
50 mm x 40 mm	1.12 metre	\$82.00 per 100

STOCKMAN

.915 m	\$ 2.11 each
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2.17.4 Staples

Sliced Point Staples (Galvanised)

	Per 25 kg Case
40mm x 4.00m	\$51.70
30mm x 4.00m	\$51.70
27mm x 2.80mm	\$55.58
25mm x 2.50mm	\$56.89
19mm or 15mm x 2.00mm	\$61.17

CYCLONE
Barbed Staples

		<u>Per 25</u> <u>kg case</u>
Galvanised	50mm x 4.00mm	\$54.42
	40mm x 4.00mm	\$54.42
	30mm x 4.00mm	\$54.42
	30mm x 3.15mm	\$57.43
Hot Dipped	4 mm	\$76.62
	3.15mm	\$79.18
<u>Concrete Post Staples</u> (for single or double hole posts)		
	5 kg bags	\$10.20
	25 kg bags	\$50.98

2.17.5 Wire Netting

CYCLONE

<u>Type</u>	<u>Height</u>	<u>Stay Spacing</u>	<u>Price/100m</u>
<u>Twinlock Hinge - Joint Boundary</u>			
<u>High Tensile</u>			
8 line	900 mm	300 mm	\$143.67
8 line	800 mm	150 mm	\$182.14
7 line	900 mm	150 mm	\$173.29
7 line	800 mm	300 mm	\$127.22
7 line	725 mm	150 mm	\$161.95
6 line	700 mm	300 mm	\$111.67
<u>Tightlock Stiff Stay Boundary</u>			
<u>High Tensile:</u>			
7 line	900 mm	300 mm	\$142.04
8 line	900 mm	300 mm	\$152.22
9 line	900 mm	300 mm	\$170.91
8 line	750 mm	300 mm	\$149.71
7 line	600 mm	300 mm	\$131.38
<u>Medium Tensile:</u>			
7 line	900 mm	300 mm	\$164.92
8 line	750 mm	150 mm	\$216.58
9 line	900 mm	150 mm	\$245.81
<u>Medium Lightweight:</u>			
7 line	900 mm	300 mm	\$133.91
8 line	800 mm	300 mm	\$143.45

Deer Fence:

17 line	1900 mm	150 mm	\$440.56
13 line	1900 mm	150 mm	\$381.43
13 line	1900 mm	300 mm	\$271.34
11 line	1550 mm	150 mm	\$306.96
11 line	1550 mm	300 mm	\$223.45

Farm Mesh

75mm x 150mm x 4 mm diameter galvanised wire.

Roll Size:	30m long x 840mm wide	\$ 15.52 per roll
	30m long x 1150mm wide	\$207.94 per roll

Netting Clips

Packet containing 1 gross	\$ 1.03 each
Bulk supply (approx. 950 per kg)	\$ 5.01 per kg

HURRICANE (These are recommended sale prices only exclusive of
GST - Consult local supplier for individual quotation)

<u>Type</u>	<u>Height</u>	<u>Stay Spacing</u>	<u>Price/100m</u>
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High Tensile

8 line	900 mm	600mm	\$143.67
8 line	900 mm	150 mm	\$182.14
7 line	900 mm	300 mm	\$138.40
7 line	800 mm	150 mm	\$167.29
7 line	725 mm	150 mm	\$161.95
6 line	700 mm	300 mm	\$111.67
Boundary Fence Tie Clips (Cartons of 100)			\$ 6.75

Farm Fence SS High Tensile

8 line	900 mm	150 mm	\$207.00
8 line	900 mm	300 mm	\$152.22
8 line	800 mm	300 mm	\$148.99

High Tensile Deer Fence

13 line	1900 mm	150 mm	\$343.00
13 line	1900 mm	300 mm	\$253.59
12 line	1800 mm	300 mm	\$236.92
12 line	1500 mm	150 mm	\$290.78

Stay Deer Fence

17 line	1875 mm	150 mm	\$440.56
13 line	1875 mm	300 mm	\$271.34
11 line	1525 mm	300 mm	\$223.45

Fawn SL High Tensile

19 line	1375 mm	150 mm	\$266.29
12 line	600 mm	150 mm	\$161.28

Goat SL High Tensile

18 line	1250 mm	150 mm	\$251.54
16 line	1025 mm	150 mm	\$221.05
12 line	1050 mm	150 mm	\$186.60

	<u>Height</u>	<u>Length</u>	<u>Price</u>
Pig	800 mm	100 m	\$186.89
		50 m	\$ 93.45
Sheep	900 mm	100 m	\$136.26
		50 m	\$ 68.13
Low Cost Permanent	800 mm	100 m	\$145.16
Utility - Electric	625 mm	100 m	\$136.49

2.17.6 Chain Link FenceHurricaneMesh Size

	<u>Wire Diameter</u>			
	<u>2.00 mm</u>	<u>2.50 mm</u>	<u>3.15 mm</u>	<u>3.55 mm</u>
37.5 mm	\$5.23	\$7.23	\$10.80	-
50.0 mm	\$4.15	\$5.53	\$ 7.76	-
75.0 mm	-	\$3.98	\$ 5.75	\$7.04
100.0 mm	-	\$2.91	\$ 4.13	\$5.08

Plastic Coated Chain Link Fence

50 mm x 2.6 mm	\$6.28/m ²
50 mm x 3.2 mm	\$7.50/m ²

2.17.7 Straining EquipmentHAYES

Chain Wire Strainer	\$ 59.93
General Purpose Strainer	\$123.13
General Purpose Strainer - Heavy Duty	\$147.00
Permanent Wire Strainer	\$ 2.22
Handlers Permanent Wire Strainer	\$ 4.69
Boundary Fence Strainer	\$ 81.99
Tension Indicator	\$ 12.46

GALLAGHER

Tightener, Permanent Wire	\$ 2.24
Handle, Permanent Wire	\$10.35
Rapid wire tightner tool	\$89.00

DONALDS

Chain Wirestrainer,	complete with tension indicator	\$72.00
	complete with tension	
	indicator and buddy clamp	\$82.00
Tension Indicator,	for use with chain wirestrainer	\$18.20
	complete with Wirestrainer grip	
	and chain	\$38.20
Buddy Clamp		\$20.50
Buddy Clamp	complete with tension indicator	
	and chain	\$46.00
Chains		\$53.45
Multigrip		\$46.20
Permanent strainers		\$ 2.15

STOCKMAN

Permanent wirestrainers	1 to 99 each	\$ 1.94
	1000 plus each	\$ 1.91

2.17.8 Post and Standard Drivers

HAYES

Standard Drivers Tubular	50 mm	\$ 33.81
	65 mm	\$ 39.85
	100 mm	\$ 63.90
	150 mm	\$114.61
	200 mm	\$150.61
Insulated batten (Square)		\$ 52.00

DONALDS

Post Driver and Accessories

Tractor operated Post Driver Mark IV		
14' 180kg weight 2 belt drive		\$2095.00
14' 230kg weight 3 belt drive		\$2263.00
16' 180kg weight 2 belt drive		\$2189.00
16' 230kg weight 3 belt drive		\$2405.00
Mark IV 14' top		\$ 56.00
Mark IV 14' bottom		\$ 35.30
Tractor operated Post Driver	- Hydraulic complete	\$ 548.00
Top Link - Heavy Duty Screw	- Short - 558 mm	\$ 120.42
	- Standard - 600 mm	\$ 120.42
Wire Rope Standard Length 8.38 m		\$ 53.00
Wire Rope - Length 9.6 m		\$ 59.10
Pilot Hole Driver	40 mm round x 1.6 m long	\$ 62.00
Post guide clamp		\$ 78.60
Manual Post Driver	80mm 9 kg	\$58.00
	160mm 15 kg	\$91.00
	160mm 20 kg	\$106.20

	160mm 25 kg	\$121.60
Manual Standard Driver		\$45.00

2.17.9 Post and Standard Removers

<u>DONALDS</u> "Muscle Mate" post puller	\$69.00
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<u>HAYES</u> Standard Lifter	\$64.01
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2.17.10 Wire Reels

<u>DONALDS</u> Wire Dispenser	\$ 75.00
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<u>HAYES</u> Combination Wire Coiler and Reel	\$184.21
Wire Reel Standard	\$ 51.00
Deluxe	\$102.79

2.17.11 Post Hole Diggers

<u>GALLAGHER</u>	
Post Hole Digger gear box, drive shaft and frame	\$1,578.00

Auger complete with Tip

	<u>Stony Tip</u>	<u>Plain Tip</u>	<u>Screen Tip</u>
100 mm	\$185.00	\$185.00	-
200 mm	\$198.00	\$198.00	\$198.00
300 mm	\$205.00	\$205.00	\$205.00
400 mm	\$323.00	\$323.00	\$323.00
500 mm	\$463.00	\$463.00	\$463.00
600 mm	\$604.00	\$604.00	\$604.00

Mate Post Hole Diggers

Powerhead, Gallagher/Mate 85, 85cc 3 HP	\$985.00
Powerhead, Gallagher/Mate 100, 100cc 3.5 HP	\$1067.00

Auger (Length 782 mm)

<u>Size</u>		<u>Single Blade</u> <u>7500 Series</u>		<u>Double Blade</u> <u>1700 Series</u>
50.8 mm	-	-	G546/2	\$ 85.33
78.2 mm	-	-	G546/3	\$100.72
101.8 mm	G545/4	\$112.44	G546/4	\$112.44
127 mm	G545/5	\$117.67	G546/5	\$117.67
152.4 mm	G545/6	\$121.42	G545/6	\$121.42
117.8 mm	G545/7	\$129.34	G546/7	\$129.34
203.2 mm	G545/8	\$133.52	G546/8	\$133.52
228.6 mm	G545/9	\$139.99	G546/9	\$139.99
254 mm	G545/10	\$147.04	G546/10	\$147.04

AGRISALES

Post Hole Borer

AG430 41.5cc Diaphragm Carburetor 35 to 1 Ratio \$950.00

Augers -	No 1580	200 mm	\$164.16
	No 1560	150 mm	\$133.61
	No 1540	105 mm	\$135.34
	No 1630-3 1 11/16 Rock Auger		\$239.72

2.17.12 Tools

HAYES

Standard Hammer \$45.53

Staple Pick \$14.00

Post Rammer - wooden handle \$16.53

- steel handle \$23.66

GALLAGHER

Pliers, Side Cutting \$31.00

Tool, Wire Twisting \$ 4.50

Pouch, Tool - Leather \$15.00

Tool Kit \$71.40

Canvas apron with pocket \$22.97

Carrier, canvas \$39.00

DONALDS

Crowbar/Rammer \$39.50

Plier Great Neck Fencing \$49.95

Fencing Pliers \$23.10

Fence Tight \$15.00

Leather Aprons \$36.12

SMCO (BELL BOOTH)

Fencers Apron \$38.85

2.17.13 Gates

Wooden

MCALPINES

Hurdles	1.8 m	\$19.80
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	2.1 m	\$20.90
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	2.4 m	\$22.00
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Gates High Cattle	3.0 m	\$64.90
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	3.6 m	\$69.30
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	4.2 m	\$74.80
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Gates High Sheep	3.0 m	\$63.80
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	3.6 m	\$68.20
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	4.2 m	\$73.70
Sheep Yard	1.8 m	\$52.80
	2.1 m	\$55.00
	2.4 m	\$57.20

Steel

CYCLONE

(galvanised steel)

	<u>Length (metres)</u>				
	<u>3.05</u>	<u>3.35</u>	<u>3.66</u>	<u>4.27</u>	<u>4.88</u>
Standard	\$ 81.15	\$ 85.42	-	-	-
Special -	-	\$102.79	\$125.44	-	-
Special Heavy	-	-	\$100.94	\$112.59	-
180 Barred	\$130.40	-	\$146.76	\$172.76	-
Stressmaster	-	-	\$121.16	\$137.47	\$170.18
Stressmaster hevvy	-	-	\$125.07	\$143.94	\$192.06
Special pairs	-	-	-	\$138.20	\$152.89

Deer Gates

3 05 m x 1900 mm	\$137.63
3.66 m x 1900 mm	\$157.14
4.27 m x 1900 mm	\$176.93

HURRICANE

All purpose, 1 m high, Galvanised Steel

	<u>Length (metres)</u>					
	<u>3.0</u>	<u>3.5</u>	<u>3.75</u>	<u>4.00</u>	<u>4.25</u>	<u>4.75</u>
Standard	\$ 91.27	\$96.50	\$100.66	-	-	-
With X Corner						
Bracing	\$102.20	\$107.17	\$111.36	\$116.73	\$120.53	\$127.2

HAYES

Tip Swing Gate	\$ 96.14
Non Return Gate	\$ 94.00
Swing Aroung Gate	\$ 89.25
Lift and Swing	\$106.00
Drafting	\$ 99.34

2.17.14 Gate Fittings

Gudgeons

Canadian Screw	12mm-20mm	\$1.68 - \$5.12
Drive	20 mm	\$4.62
Std. Through Post	200-400 mm	\$44.41-\$6.71

Hinge Straps

Standard Canadian	150mm-300mm	\$3.23 - \$5.63 per pair.
Heavy duty	300mm-600mm	\$6.74 - \$11.48 per pair.

Clamp Hinges

Single way - concrete post	125mm-200mm	\$16.75 - \$18.52 per set
Two way - concrete post	125mm-200mm	\$18.45 - \$20.39 per set

Gate Fastenings

HAYES

Fork Chain fastener	for double gates	\$10.61
	for single gates	\$ 8.70
Adjustable fastener	150-200mm	\$13.03
Cattle gate chain		\$19.75
Hook and Eye Gate Fastener		\$ 5.50
Hitch Pin	19mm	\$ 6.20
	22mm	\$ 6.50
	25mm	\$ 6.83

2.17.15 Cattle Stops

HUMES

2300 mm x 1800 mm x 315 mm	\$406.18
2300 mm x 1200 mm x 315 mm	\$274.46

MCKENDRYS

2.5 m x 1.8	\$245.00
2.5 m x 1.5	\$220.00
2.5 m x 1.2	\$190.00

2.17.16 Electric Fence Energisers

GALLAGHER

Mains Powered

Energiser BEV 3	\$287.00
Replacement Module BEV3	\$ 54.75
Energiser Mains/Battery	\$299.00
Replacement Module Mains/Battery	\$110.00
Energiser Super 60	\$393.00
Replacement Module Super 60	\$ 60.00
Energiser MPE2	\$175.00

Battery Powered - Battery not included

Energiser Super Battery Elephant	\$445.00
Replacement Module Super Battery Elephant	\$130.00
Energiser E8	\$168.00
Replacement Module E8	\$ 55.00
Energiser module E12	\$185.00

Replacement module E12	\$ 55.00
Energiser KM2	\$160.00
Replacement module KM2	\$ 55.00
Energiser Mini Strip Grazer	\$ 97.00
Replacement Module Mini Strip Grazer	\$ 38.00

Battery Included:	
Energiser E8	\$193.00

Solar Powered - Battery not included

Super Battery Solar Kit 30 Watt	\$1661.00
E12 Solar Kit 10 Watt	\$ 794.00

DONAGHYS

Mains Powered Operated

Stafix Model 700 - Super 240V	\$595.00
Replacement Module for Model 700	\$117.00
Stafix Model 500 - High Power 240V	\$375.00
Replacement Module for 500	\$ 84.00

Battery Powered

Stafix Model 150 High Power - 12V external battery	\$450.00
Replacement Module for Model 150	\$ 82.80
Stafix Model 90 - Strip Controller - 9V int. Cells	\$ 91.00
Replacement Module for Model 90	\$42.90

STOCKMAN

BE 0001	Tapemate Battery Energiser	\$ 88.50
BE 0013	Outpost Battery Energiser	\$145.00
BE 0014	Farmlet Mains Energiser	\$138.00
BE 0015	Rancher Mains Energiser	\$235.00

2.17.17 Earth Stakes

<u>CYCLONE</u> 1.83m x 25mm Galvanised pipe	\$29.73
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2.17.18 Insulators

GALLAGHER

Bobbin Type B	\$0.26
Wooden Post	\$0.25
Strain Type S	\$0.48
Gate Break Insulated	\$3.80
Porcelain Strain Insulator	\$1.08
Offsets with Insulator	\$1.16-\$1.80

TALBOT PLASTICS

	0 - 200	201 - 5,000	5,000 plus
10 mm Round Standard	22c	17.6c	15c
Bobbins	24c	19.2c	16c
Steel Standards	26c	20.8c	17c
H.D. Nail On	26c	20.8c	17c
Strainer	35c	28c	23c

STOCKMAN

Plastic Strain	100/500 per carton	.37 ea
Porcelain Strain	100 per carton	1.27 ea
Porcelain Corner Insulator No. 107 224	per carton	1.44 ea
Wooden Post Black	100/500 per carton	.22 ea
Wooden Post (Longlife) - Brown	100/500 per carton	.42 ea
Y Standard	100/500 per carton	.26 ea
Outrigger 10" with Y Insulator	50 per carton	1.02 ea
Y Longlife Insulator	50 per carton	1.33 ea
Staple Insulator	500/carton - 5 x 100	.24 ea
Universal Insulator	100/500 per carton	.31 ea

2.17.19 Electric Fence Wire, Cable and Netting

GALLAGHER

Cable, Undergate 1.6 mm, 100 mm Double Insulated	\$ 35.00
50 mm Double Insulated	\$ 17.65
Wire, Leadout, aluminium, 3.15 mm, 1600 m	\$368.50
, coated steel, 2.5 mm, 1000 m	\$180.00
Polywire, 6 strand 500 m	\$ 32.88
Polywire, 6 strand 200 m	\$ 13.28
Polyrope, 25 m	\$ 14.02
Polytape, 5 strand, 200 m	\$ 22.50
Cable, Leadout, 2.5 mm, 50 m Double Insulated	\$ 40.00
100 m Double Insulated	\$ 80.00

DONAGHYS

'Livestrand' 200 m	\$ 12.49
Stafix 'Livestrand' 350 m reel	\$ 21.66
500 m reel	\$ 30.77
Hottape 200 m reel	\$ 20.38
Stafix Heavy Duty Underground Cable 50 m	\$ 38.00
'Flexinet' Sheep Netting	\$ 98.00
Rabbit Netting	\$ 91.00
Horse/Goat/Deer netting	\$124.00

CYCLONE

Twinlock Hinge, Joint Field Fence, Electric			
5 line	525 mm	300 mm	\$88.31/100m

STOCKMAN

Aluminium Lead Out Wire		1000 m roll	\$227.00
Hotwire 200 m 6 Strand		10 per carton	\$11.44 ea
Hotwire 500 m 6 Strand		10 per carton	\$29.26 ea
Underground Cable 100 m		1-4 rolls	\$36.00 roll
5 or more rolls			
Underground Cable 50 m		1-4 rolls	\$18.00 roll
Undergate Cable			
Undergate Cable 2.5 mm	100 m	1-4 rolls	\$61.75 ea
Tape V.G.S.	200 m		\$22.36 ea
Tape V.G.S.	400 m		\$45.14 ea

2.17.20 Electric Fence Standards

DONAGHY'S

Double Foot Rod Standard	10 mm	\$2.10
Deer Standard	12 mm	\$5.12
Flexi-Posts	760 mm with Pigtail	\$2.20-\$3.14
	760 mm with Step	\$2.58
	760 mm with Spike	\$1.90
Self-Insulated Electric Fence Standard		\$2.44
Fibreglass	Post - 1200mm x 10mm (Orange)	\$2.25
	Post - 1370mm x 13mm (White)	\$4.20
	Outrigger for 10mm post	\$0.55
	Outrigger for 13mm post	\$0.70
	Quick clips for posts	\$0.15
'Stafix' 10 mm Rod		\$2.10

GALLAGHERS

Fibreglass

Post 1200 x 10 mm (Orange)	\$2.25
Outrigger, pointed 10 mm x 200 mm (Orange)	\$0.55
Outrigger, pointed 10 mm x 300 mm (Yellow)	\$0.70
Post 1370 x 13 mm (White)	\$4.20
Quick Clip for 10 mm Post	\$0.16
Quick Clip for 13 mm Post	\$0.17
Pressure Plate (for 10 and 13 mm)	\$0.49
Cap, Driver	\$10.75
Driver and Pilot Holer for Posts	\$17.00
Tread-in, steel galvanised, Pigtail	\$2.25
Tread-in, Polymer, Multi-wire	\$2.70

Insultimber

Post - 1380mm x 38mm x 38mm	\$4.23
Post - 1520mm x 38mm x 38mm	\$4.41
Post - 1380mm x 38mm x 26mm	\$3.33
Post - 600mm x 38mm x 26mm	\$1.28
Post - 210mm x 50mm x 50mm, Deer	\$7.88
Droper - 1520mm x 38mm x 26mm, Deer	\$3.70
Droper - 940mm x 38mm x 26mm	\$1.74
Tie downs 700mm x 38mm x 26mm	\$1.28
Wire Clips ,	\$0.11
, plastic coated	\$0.08
Cap for driving Insultimber	\$18.35
Driver for Insultimber	\$85.00

STOCKMAN

Plastic	50 per carton	each	\$2.88
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AGRISALES (Wrightson Dalgety)**Fibreglass Posts**

W108	10mm x 1.2m F/G Posts	50	\$2.55
W114	10mm x 2m F/G Deer Posts	50	\$4.22
W126	13mm x 1.2m F/F Posts	50	\$4.06
W132	13mm x 2m F/G Deer Posts	50	\$7.14

Fibreglass Droppers

W156	10mm x 840m F/G Dropper	50	\$1.760
W162	10mm x 1250m F/G Deer	50	\$2.61

Fibreglass Outriggers

W251	10mm x 200m Pointed	50	\$0.56
W257	13mm x 200m Pointed	50	\$0.91

Clips

W301	10mm Clip	250	\$0.14
W307	13mm Clip	250	\$0.14
W313	10mm Dropper Clip	100	\$0.14

2.17.21 Electric Fence Reels**DONAGHYS**

'Stafix' Self Insulated Reel	\$ 21.00
'Stafix' Fence-Mounted Mini Reel	\$ 18.00
Reels (Self Insulating), 200m prewound livestrand	\$ 33.49
with 350m prewound livestrand	\$ 42.65
with 500m prewound livestrand	\$ 51.77
Triple Reel c/w mounting post, each prewound, 200m	\$107.31
each prewound with 350m	\$138.24

Three in one Reel prewound 3 x 200 6 wire live strand		\$ 98.00
Mounting Post (Self Insulating) 1-3 reels		\$ 9.20
Mounting Post extra length for deer,	takes 4 reels	\$ 12.10
	takes 5 reels	\$ 13.10
Power winder complete, 12 Volt battery drive		\$ 83.00

GALLAGHERS

Reel Strip Grazing	- Small	\$ 19.85
	- Medium	\$ 29.70
	- Large	\$ 48.30
Triple/reel System		\$143.00
Stand, Reel for deer fencing (1-4 reels)		\$ 23.10
Stand, Reel (1-3 reels)		\$ 18.90
Lead connectors	- Multi reels	\$ 8.75
	- Single reel	\$ 3.25

HAYES

Multiple reels	2 coil	\$128.52
	3 coil	\$172.02
	4 coil	\$286.32

STOCKMAN

Fence Reel Standard		\$16.50
Fence Reel - Large (only)		\$19.32
Fence Reel - Mini complete with handle		\$17.06
Fence Reel - SRW with handle		\$23.93
Fence Reel - SR200 with handle		\$45.58
Fence Reel - SR400 with handle		\$66.58
Fence Reel - TRW - Triple Wire Reel		\$112.64
Fence Reel - TR200 - Triple Reel, 200 m		\$175.62
Fence Reel - TR400 - Triple Reel, 400 m		\$238.23

2.17.22 Electric Fencing Accessories

GALLAGERS

Testers

Tester, Neon	\$ 23.00
Meter, Digital (D.V.M.)	\$ 85.00

Batteries

Battery,	Lattern	\$ 6.35
	Dry Cell	\$ 46.00
	9 Volt (DVM)	\$ 1.09
	Rechargeable	\$ 27.50
	Low loss	\$185.50

Monitors and Alarms

Live Lite (Gallagher)	\$ 24.95
Monitor (A.R.M.S.) 4 Channel	\$974.00
1 Channel	\$606.00
Alarm, Fence Voltage	\$244.00

Earthing Equipment

Clamp, joint galvanised	\$ 0.46
Anchor, Arrowhead aluminium	\$ 3.00
Tie Down Screw-in	\$ 2.90
Stake, Earthing, Galvanised angle, 2m	\$24.06
Clamp, Earth, Galvanised	\$ 3.75

STOCKMAN

Contact sealent		\$ 3.47 ea
Energy limiter		\$11.53 ea
Fence Warning Signs		\$ 2.50 ea
Flexible Connectors	10 per packet	\$ 1.08 ea
Isolating Switch	5 per packet	\$ 7.76 ea
Joint Clamps	16 per packet	\$ 0.48 ea
Parallel Jaw Pliers 8"		\$31.72 ea
Stockman Gateway 1-24		\$106.87 ea
Rammer and Attachment		\$ 59.00 ea
Spring Gate - Complete		
with Activator and Anchor	20 per carton	\$ 9.47 ea
Tool Kits - Complete with pouch		\$54.44 ea
Wire Strainer - Insulated		\$ 3.52 ea
Wire Strainer Handle		
Wire Twisters	10 per packet	\$ 3.30 ea

Insulated Strainers (permanent wire (Hayes))	\$ 3.55
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2.17.23 Guide to Fencing Costs (1986/87)**Standard Sheep/Cattle Fence for Flat to Rolling Country**

Spacings: Posts, 4m apart
 Droppers, 4 between each post
 Strainer every 400 metres

1. Fence design with 8 2.5mm plus 1 1.7 wire (electric)**Materials Required for 400 metres:**

Posts	100-125mm x 1.8m	100 @ \$ 6.00	\$600.00
Droppers	50 x 50mm x 1.0m	400 @ \$ 0.87	\$348.00
Strainers	200mm x 2.1m	2 @ \$16.00	\$ 32.00
Stays	75 x 100 x 2.7m	2 @ \$ 8.00	\$ 16.00

2.5mm H.T. wire 3200m @ \$0.07/m	\$224.00
Gate 3.5m	\$ 96.50
	<u>\$1316.50</u>
Cost per metre = \$3.29	per 400 metres

2. Fence design with 7.25mm wires and 15mm barb.

Materials Required for 400 metres:

Posts	\$600.00
Droppers	\$348.00
Strainers	\$ 32.00
Stays	\$ 16.00
2.5m H.T. wire 2800m at \$0.07/m	\$196.00
2.5mm (75mm) Barb 400 m at \$0.23/m	\$ 92.00
Gate 3.5m	<u>\$ 96.50</u>
	<u>\$1380.50</u>
Cost per metre = \$3.45	per 400 metres

Deer Fence - boundary fence for flat to rolling country

Spacings: Posts, every 5 metres

Strainers, every 200 metres

1. Materials Required for 400 metres

Stockman Posts 2.7m	80 at \$14.30	\$1144.00
Stockman strainers 2.7m	3 at \$26.13	\$ 78.39
Stockman stays 2.7m	3 at \$ 8.00	\$ 24.00
2.5mm H.T. wire	1200m at \$0.07/m	\$ 84.00
150mm x 1900m netting 13 line	400m at \$3.814/m	\$1525.64
Gate 3.66 x 1900mm		\$ 157.14
Staples	400m at \$0.04/m	<u>\$ 16.00</u>
	per 400 metres	<u>\$3029.17</u>

Cost per metre \$ 7.57

2. Internal Deer Fencing

Fence Design 1.

Six wire electric, no netting

Spacings: Flat country, posts up to 30 metres

Droppers up to 8 metres

Tie downs: where necessary, tie downs should be constructed using droppers rather than posts. This will reduce costs and maintain a degree of flexibility in the fence.

Materials Required for 1000 metres:

Posts 2.7m	33 at \$14.30	\$471.90
Droppers 2m	100 at \$ 3.70	\$370.00
Procelain stain insulators	18 at \$ 1.05	\$ 18.90
Joint Clamps	6 at \$ 0.46	\$ 2.76
Cut-out switch	1 at \$ 7.25	\$ 7.25

Strainers	3 at \$26.13	\$ 78.39
Stays	3 at \$ 8.00	\$ 24.00
2.5mm H.T. wire 1 coil = 648m	9.4 coils @ \$44.80	\$421.12
	cost per 1000 m	<u>\$1394.32</u>
Cost per metre = \$1.39		

Fence Design 2.

Consists of 3 live wires above a cyclone 600m 7 line netting.

The netting provides an excellent physical barrier for young stock and yet the fence is still inexpensive and quick to erect.

Spacings: same as for the above fence.

Materials required for 1000 metres

Posts	33 at \$14.30	\$471.90
Droppers (2 m)	100 at \$ 3.70	\$370.00
Procelain strain insulators	9 at \$ 1.05	\$ 9.45
Joint clamps	3 at \$ 0.46	\$ 1.38
Cut-out switch	1 at \$ 7.25	\$ 7.25
Strainer posts	3 at \$26.13	\$ 78.39
Stays	3 at \$ 8.00	\$ 24.00
2.5mm H.T. wire 4.7 coils	at \$44.80	\$210.56
Cyclone netting (600mm x 300 mm 7 line T/L)		\$131.38
	\$131.38/100m	<u>\$1313.80</u>
	cost per 1000 m	<u>\$2486.73</u>

Cost per metre = \$2.49

2.18 FARM MACHINERY AND EQUIPMENT COSTS

2.18 Tractors

FORD (1986 prices)

1210 4 WD	11.9 kW (16 HP)	\$10,210.00
1910 2 WD	23.8 kW (32 HP)	\$12,732.00
1910 4 WD	23.8 kW (32 HP)	\$14,838.00
2110 4 WD	29.6 kW (40 HP)	\$18,397.00
3910 2 WD	37.0 kW (50 HP)	\$20,620.00
3910 4 WD	37.0 kW (50 HP)	\$26,550.00
4110 2 WD	42.0 kW (57 HP)	\$22,500.00
4110 4 WD	42.0 kW (57 HP)	\$28,289.00
4610 2 WD	47.1 kW (64 HP)	\$24,679.00
4610 4 WD	47.1 kW (64 HP)	\$31,142.00
5610 2 WD	55.9 kW (76 HP)	\$28,500.00
5610 4 WD	55.9 kW (76 HP)	\$34,550.00
6610 2 WD	63.3 kW (86 HP)	\$30,822.00
6610 4 WD	63.3 kW (86 HP)	\$37,183.00
7610 2 WD	75.8 kW (103 HP)	\$33,130.00
7710 2 WD	75.8 kW (103 HP)	\$49,775.00
TW25 Built Up 2 WD	121.0 kW (163 HP)	\$84,368.00
TW25 Built Up 4 WD	121.0 kW (163 HP)	\$92,505.00
Roll Master Cab		\$ 5,000.00

CASE INTERNATIONAL

1194	2WD C/W R.O.P.S.	49 HP	\$20,940.00
1194	2WD Narrow Lowered	49 HP	\$24,780.00
1194	2WD Super C/W R.O.P.S.	49 HP	\$22,265.00
1194	2WD Super Lowered	49 HP	\$24,100.00
485	2WD Std C/W R.O.P.S.	53.6 HP	\$21,997.00
485	2WD T.A C/W R.O.P.S.	53.6 HP	\$23,016.00
485	4WD Std C/W R.O.P.S.	53.6 HP	\$27,250.00
485	4WD T.A C/W R.O.P.S.	53.6 HP	\$27,900.00
1294	2WD C/W R.O.P.S.	62 HP	\$24,885.00
1294	4WD C/W R.O.P.S.	62 HP	\$30,520.00
585	2WD Std C/W R.O.P.S.	62 HP	\$24,954.00
585	2WD T.A C/W R.O.P.S.	62 HP	\$25,710.00
585	4WD T.A C/W R.O.P.S.	62 HP	\$32,420.00
585	4WD T.A XL Cab	62 HP	\$38,331.00
685	2WD T.A C/W R.O.P.S.	71.8 HP	\$30,292.00
685	4WD T.A C/W R.O.P.S.	71.8 HP	\$36,277.00
685	2WD T.A XL Cab	71.8 HP	\$34,540.00
685	4WD T.A XL Cab	71.8 HP	\$44,047.00
1394	2WD Syn C/W R.O.P.S.	77 HP	\$28,134.00
1394	2WD Powershift C/W R.O.P.S.	77 HP	\$31,451.00
1294	2WD Cab	62 HP	\$32,480.00
1394	4WD Syn C/W R.O.P.S.	77 HP	\$35,171.00

1394	2WD Powershift Cab Aircon	77 HP	\$39,711.00
1394	4WD Powershift Cab Aircon	77 HP	\$43,444.00
785	4WD T.A C/W R.O.P.S.	80 HP	\$35,492.00
785	4WD T.A XL Cab	80 HP	\$42,500.00
1494	2WD N.C. Synchromesh	85 HP	\$32,185.00
1494	2WD Powershift Cab Aircon	85 HP	\$43,002.00
1494	4WD Powershift Cab Aircon	85 HP	\$49,541.00
856	2WD XL Cab	85 HP	\$43,660.00
856	4WD XI Cab	85 HP	\$49,801.00
956	2WD XL Cab Aircon	95 HP	\$50,335.00
956	4WD XI Cab Aircon	95 HP	\$57,392.00
1056	2WD C/W R.O.P.S.	105 HP	\$44,710.00
1056	2WD Cab Aircon	105 HP	\$54,310.00
1694	4WD Powershift Cab Aircon	112 HP	\$58,425.00
1896	2WD Powershift C/W R.O.P.S.	122 HP	\$56,363.00
1896	2WD Cab Powershift Aircon	122 HP	\$66,460.00
1255	2WD XL Cab Aircon	125 HP	\$70,640.00
1255	4WD XL Cab Aircon	125 HP	\$76,490.00
2096	2WD Powershift Deluxe Cab Aircon	143 HP	\$78,695.00
2096	4WD Powershift Deluxe Cab Aircon	143 HP	\$81,000.00
1455	AWD XL Cab Aircon	145 HP	\$84,880.00
2294	4WD Powershift Deluxe Cab Aircon	160 HP	\$95,005.00
2394	2WD Powershift Deluxe Cab Aircon	180 HP	\$91,942.00
5288	2WD Deluxe Cab Aircon	180 HP	\$108,978.00
5288	4WD Deluxe Cab Aircon	180 HP	\$124,215.00
4694	2 Equal Wheel Powershift Cab Aircon	261 HP	\$157,000.00

MASSEY FERGUSON

MF 240	8 speed, Powershift	36 kW (48 HP)	\$21,549.00
MF 254	4WD, Hydrostat, Powershift		\$27,302.00
MF 265	12 Speed Synchro P/S	44 kW (63 HP)	\$23,600.00
MF 290	12 speed	82 HP	\$25,760.00
MF 290	4WD		\$32,025.00
MF 675	2WD		\$32,440.00
MF 675	4WD		\$38,210.00
MF 690	4WD		\$43,982.00
MF 690	2WD		\$36,162.00
MF 2680	4WD, cab	(126 HP)	\$51,804.00
MF 2720	4WD, cab		\$62,418.00
MF 6694		95 HP	\$47,183.00
MF 275	4WD		\$31,087.00

ZETOR

<u>Model</u>	<u>kW (HP)</u>	<u>2WD/4WD</u>	<u>Transmission</u>	<u>Other</u>	<u>Price</u>
5245	37 (50)	4WD	10F-2R	SF	\$19,650.00
6245	44 (60)	4WD	10F-2R	SF	\$23,480.00
				Cab	\$26,450.00
7245	51.5 (70)	4WD	10F-2R	SF	\$26,300.00
7245	51.5 (70)	4WD	10F-2R	Cab	\$29,630.00

KUBOTA

B7100	DP				\$ 8,270.00
B7100	HST DP		16 HP		\$10,765.00
B7100	Std HST DP				\$10,596.00
L405	FP OC 2WD		40 HP		\$20,014.00
L405	DT		40 HP		\$17,394.00
L4150	DT Mech. Shuttle transmission		50 HP		\$24,793.00
L4150	DT Hydraullic Shuttle		50 HP		\$26,030.00
L2850			34 HP		\$18,472.00
M7950	DT 2WD		84 HP		\$35,180.00
M7950	DT 4WD		84 HP		\$39,776.00
M7950	4WD Factory Cab				\$51,419.00
M4050	2WD		48 HP		\$18,650.00
M4050	4WD		48 HP		\$21,974.00
M4950	2WD				\$22,943.00
M4950	4WD				\$28,730.00
M5950	2WD		63 HP		\$25,749.00
M5950	4WD		63 HP		\$32,371.00
M6950	2WD		75 HP		\$29,617.00
M6950	4WD				\$35,645.00
M8950	4WD	- Non Cab	96 HP		\$43,079.00
		- Factory Cab			\$57,149.00

JOHN DEERE

JD 950	2WD	31 HP		\$13,233.00
JD 950	4WD	31 HP		\$15,319.00
JD 1050	2WD	38 HP		\$15,312.00
JD 1050	4WD	38 HP		\$17,448.00
JD 1040	2WD	53 HP		\$24,780.00
JD 1040	4WD	53 HP		\$28,579.00
JD 1140	2WD	59 HP		\$24,754.00
JD 1140	4WD	59 HP		\$31,162.00
JD 1640	2WD	66 HP		\$29,204.00
JD 1640	4WD	66 HP		\$35,091.00
JD 1640	2WD	66 HP Factory Cab		\$36,204.00
JD 1640	4WD	66 HP Factory Cab		\$42,033.00
JD 2040	2WD	79 HP Factory Cab		\$42,225.00
JD 2040	4WD	79 HP Factory Cab		\$48,075.00
JD 2140	2WD	90 HP		\$35,000.00

JD 2140	2WD	90 HP	\$35,000.00
JD 2140	4WD	90 HP	\$41,563.00
JD 2140	2WD	90 HP Factory Cab	\$41,013.00
JD 2140	4WD	90 HP Factory Cab	\$51,945.00
JD 3140	2WD	106 HP Factory Cab	\$54,100.00
JD 3140	4WD	106 HP Factory Cab	\$61,946.00
JD 3640	4WD	117 HP Factory Cab	\$69,813.00

SHIBAURA

4540	4WD	45 HP	\$ 17,000.00
6340	4WD	63 HP	\$25,000.000

2.18.2 Crawlers

UNIVERSAL (1985-86 Prices)

445 S	33.1 kW (45 HP)	Less blade	\$20,689.00
445 S	33.1 kW (45 HP)	With Pearson blade	\$25,889.00

2.18.3 Combine Harvesters

CLAAS 1985/86 Prices

DOM 48	12' Cutter Bar	75 HP Mech. Drive	\$ 87,500.00
DOM 68	13' Cutter Bar	100 HP Mech. Drive	\$113,500.00
DOM 76	15' Cutter Bar	150 HP Hyd. Drive	\$140,640.00
DOM 86	15' Cutter Bar	120 HP Mech. Drive	\$145,460.00
DOM 96	17' Cutter Bar	150 HP Hyd. Drive	\$176,520.00
DOM 108	20' Cutter Bar	205 HP Hyd. Drive	\$196,500.00
DOM 115CS	20' Cutter Bar	250 HP Hyd. Drive	\$199,240.00

MASSEY FERGUSON

Model

810	12' table with cab	\$ 99,600.00
815	14' table with cab	\$104,500.00
845	16' table with cab	\$139,000.00
860	18' table with cab	\$200,000.00

CASE INTERNATIONAL

1420	4.6 m pltfm (15')	Axial Flow	\$142,375.00
1460	5.2 m pltfm (17.5')	Axial Flow	\$172,685.00
1480	6.7 m pltfm (22.5')	Axial Flow	\$204,975.00

STB with air conditioning monitors, trailer, spare knife, sieves.

JOHN DEERE

JD 1055	4.2m platform	\$108,000.00
JD 1075		\$138,000.00

NEW HOLLAND/CLAYSON

8030	Ford 2712E Mech. drive 55.7 kW	\$103,000.00
8040	Fiat 806, 77.2 kW C/w cab	\$130,000.00
8050 4.6 m	Mech. drive, Complete with cab	\$138,000.00
8060 4.6 m	Grain monitor, Ford (116 HP) eng	\$150,000.00
8070 6.0 m	Hydro. drv, cab, Merc. (175 HP)	\$176,000.00
TF44 6.0 m	Hydrostatic, 220 HP	\$225,000.00

2.18.4 Forage Harvesters**GALLAGHER**

	1.07 m <u>Offset</u>	1.37 m <u>Offset</u>	1.37 m <u>Central</u>
Multicut			
Without chute	\$4888.00	\$5116.00	\$6190.00
Wide mouth chute	-	\$5614.00	\$6692.00
Main chute & short top swivel	\$5582.00	\$5878.00	\$6953.00
Side loading chute & long top swivel	-	\$6066.00	\$7140.00
Fine cut			
Offset built/ order	\$4482.00	-	-
Without chute	-	\$4803.00	\$6520.00
Wide mouth chute	-	\$5301.00	\$7022.00
Main chute and top swivel	\$5176.00	\$5565.00	\$7283.00
Side loading, chute and long top swivel	-	\$5753.00	\$7470.00

Back loading chutes

1.35m Central Wide Mouth Chute		\$ 502.00
1.05m Offset Wide Mouth Chute		\$ 498.00
1.35m Offset Main Chute		\$ 447.00
Short Top Swivel (46")		\$ 336.00
Side loading Chute 1.35m		\$ 614.00
Hay & Scrub Chute - pre wilt	- 1.35m	\$ 410.00
- scrub safety chute	- 1.35m	\$ 511.00

Accessories

Bolt on Roller Assembly	1.35m	\$ 751.00
Fine Cut Bar adjustment	1.35m	\$ 196.00

TAARUP

101	Maize Harvester	\$ 6,357.00
1350	Forage Harvester	\$ 7,239.00
105	Forage Harvester	\$ 12,900.00
106	Forage Harvester	\$ 16,742.00
502	Forage Harvester	\$ 17,178.00
602	Forage Harvester with metal detector	\$ 27,883.00

GILTRAP

Electric remote control for turning chute on Gallagher	
Forage Harvester	\$ 480.00
Extra switch and cable	\$ 75.00

TULLOCH MENGLE

Disc Roto Forage Harvester - self propelled	
Model SF 300	\$132,735.00

'Cut and Blow'	
CB 750 Super Forage Harvester	\$27,455.00

Precision Cut Forage Harvester

JF Precision Cut Forage Harvester	
(side mounted)	
FC 80 model	\$11,725.00
Manual Vola-Flex cable	\$ 605.00
Hydraulic control	\$ 875.00
Electric control	\$ 1,065.00
FC 90 C/w elec controls -chute & spout	\$16,265.00
Two drum mower attachment	\$ 5,165.00
FC 110C/w elec controls - chute & spout	\$19,985.00
Two row maize attachment	\$ 8,705.00
Two drum mower attachment	\$ 5,165.00
Hydraulic Pickup Trailer Hitch	\$ 1,195.00
FC 800 (side mounted)	\$22,545.00
FCT 900 (trailed)	\$28,815.00
Jones Super 245 Precision Chop, 5' Pick up	\$18,550.00

Double Chop

JF FDT 150 5' Cutting width, 3 knives,	\$12,730.00
Optional: Pick up drawbar	\$ 995.00

FECO

PZ Scylla	\$24,900.00
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JOHN DEERE

JD 3760 Forage Harvester	\$25,500
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2.18.5 Trucks

MAZDA

B1600	Cab and Chassis	\$20,765.00
B2000	Well Side	\$22,765.00
B2200	C/C	\$21,615.00
B2000	W/S	\$23,615.00
B2000	C/c	\$23,955.00
B2200	W/S	\$25,955.00
B2000	Cab Plus C/C	\$24,950.00
B2000	Cab Plus W/S	\$27,650.00

LAND ROVER (GST included)

110	C/Cab	8cp	\$31,752
110	HC P/Up	8cp	\$37,569
V8	Chassis Cab		\$36,456
V8	High Country Pick-up		\$39,102
V8	Hard Top		\$40,582
V8	Station Wagon		\$46,525

TOYOTA

Hi-Lux	4WD	Cab Chassis Petrol	\$30,000.00
	4WD	Cab Chassis Diesel	\$32,500.00
	4WD	Utility Petrol	\$32,000.00
	4WD	Utility Diesel	\$34,500.00
	4WD	Double cab, Petrol	\$36,500.00
	4WD	Double cab, Diesel	\$39,000.00
Hi-Lux	2WD	Cab Chassis Petrol 1600cc	\$20,000.00
	2WD	Cab Chassis Petrol 2000cc	\$21,500.00
	2WD	Cab Chassis Diesel	\$24,300.00
	2WD	Utility Petrol	\$23,500.00
	2WD	Utility Diesel	\$26,300.00
	2WD	Double Cab Petrol	\$28,000.00

HYUNDAI

pony ute		\$17,500.00
Excel	5 speed	\$19,460.00
Stellar	1.6 litre	\$20,495.00
	2.0 litre	\$27,295.00
	Automatic	\$28,850.00

DAIHATSU (GST Included)

Diesel Delta Trucks

Model

V57HS	1.5 tonne	\$24,750.00
V58L	Low Truck 2 tonne	\$26,495.00
V57PWS	Double Cab 1/2 tonne	\$31,495.00

V76HU Wide Cab 4 tonne	\$33,995.00
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SUZUKI

413P F Super Ute	\$19,690.00
SB308 F Manual	\$15,995.00
SB308 F Auto.	\$17,400.00
SK 410U	\$18,392.00
ST 90K	\$10,945.00
SJ 413P Cab & Chassis	\$17,490.00
SJ 413 V5X Hardtop	\$22,790.00
SJ 413 VL Hardtop	\$21,850.00

HOLDEN

Rodeo utility petrol	1600 cc	\$14,225
Rodeo Utility petrol 4 x 2	2000 cc	\$15,540
Rodeo Utility petrol 4 x 4	2000 cc	\$20,350
Jackaroo		\$27,000

ISUZU

NKR 55E 2 tonne	\$25,240.00
NKR 55EW 1.75 tonne	\$31,205.00
NKR 57L 2.5 - 3 tonne	\$27,345.00
NPR 57LW 2.5 - 3 tonne	\$34,930.00
NPR 57L 3 tonne	\$30,785.00
NPR 59P 4 tonne	\$34,930.00

2.18.6 Farm Bikes

YAMAHA (1986 Prices)

AG 100J	2 Wheeler	\$2,695
AG 175J	2 Wheeler	\$2,995
AG 200L	2 Wheeler	\$3,799
YFM 200N	4 Wheeler	\$5,330
YFM 255S	4 Wheeler	\$6,199
YTM 200 ER	3 Wheeler	\$4,799
YTM 225 XL	3 Wheeler	\$4,299
YTM 225 DRN	3 Wheeler	\$5,199

KAWASAKI (1986 Prices)

KU 100 BII	2 Wheeler	\$2,499
KU 250 A3	2 Wheeler	\$3,549
KLF 185 A1	4 Wheeler	\$4,499
KLF 300 A1	4 Wheeler	\$6,649

SUZUKI

Farm:

TF 100 X	\$2,486
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TF 185 X		\$3,176
DF 125 O	Mudbug	\$3,285
LT 523 OG	Quadrunner	\$5,795
LT F4WD	Quadrunner	\$7,564

Dual Purpose:

TS 185 ER		\$2,657
DR 200 G		\$3,611
DR 250 SG		\$4,033
DK 600 RG	Dakar	\$7,006

HONDA (1986 Prices)

XR 600	4 Wheeler	\$6,435
XL 250	4 Wheeler	\$4,276
TLR 250	3 Wheeler	\$4,452
TLR 200	3 Wheeler	\$4,121
CT 185	2 Wheeler	\$3,499
CT 125	2 Wheeler	\$3,065
CT 110	2 Wheeler	\$2,699
XR 100	2 Wheeler	\$2,599
TRX 125	4 Wheeler	\$3,964
ATC 250	3 Wheeler	\$5,449
ATC 200	3 Wheeler	\$3,790
GT 200 E	2 Wheeler Auto Ag	\$3,999

DONALDS

Deluxe farm bike trailer 6.5" wide wheels	\$ 651
Deluxe farm bike trailer 9.5" wide wheels	\$ 728
Deluxe farm bike trailer crate	\$ 163

2.18.7 Ploughs

DUNCAN

535 mounted	3 furrow c/w landwheel	\$3,400
	4 furrow c/w landwheel	\$3,990
562 Semi-trailed Plough	6 Furrow Rigid	\$10,006
	7 Furrow Rigid	\$12,153
	8 Furrow Rigid	\$13,530

CLOUGH

2000 AR Autocrat	4 Furrow (In-furrow)	\$10,966
	5 Furrow (In-furrow)	\$12,388
	6 Furrow (In-furrow)	\$13,913
	7 Furrow (On-land)	\$17,993
	8 Furrow (On-land)	\$19,427
	9 Furrow (On-land)	\$21,290
860 Tunnel Plough		\$ 1,121

BELGRAVE IMPLEMENTS (1986 Prices)

Plough Shares 12 mm steel,	35 cm bolt-on forged tips	\$ 29.50
	40 cm bolt-on forged tips	\$ 30.50
	RNF bolt-on forged tips	\$ 33.75

TULLOCH - KVERNELAND

AD4F	mounted	\$15,495.00
BB5F	semi-mounted	\$22,500.00
	additional furrow	\$ 2,845.00
BB6F	semi-mounted	\$25,500.00
Series 850 Std semi mounted plough		
5 Furrow 12" front		\$6,575.00
6 Furrow 12" front 3" rear ram		\$7,980.00
MultiploUGH		
Mounted	3 furrow	\$5,998.00
	4 furrow	\$7,520.00
Semi-mounted	4 furrow	\$8,890.00
	5 furrow	\$10,250.00

2.18.8 Mole Drain Ploughs

BELGRAVE (1986 Prices)

Trailing	\$ 601.00
Three point linkage	\$ 721.00
Combination	\$ 816.00
Alkathene sowing tube	\$ 56.50
Alkathene sowing blade, 3 pt linkage model	\$1358.00
with adjustable spool holder	\$1562.09
Alkathene sowing plough, trailing model	\$2126.00
with adjustable spool holder	\$2327.00

CLOUGH

960 3 Row Ridger

\$1170.00

2.18.9 Chisel Ploughs and SubsoilersCLOUGH

Goliath Chisel plough/cultivator	7 tine (2.7 m)	\$3,916
	9 tine (2.7 m)	\$4,315
	11 tine (3.8 m)	\$4,869
	13 tine (3.8 m)	\$5,328
	15 tine (4.3 m)	\$6,303

HOWARD (Paraplow)

500 Series	2 leg c/w Standard legs and disc assemb.	\$ 5,938
	2 leg c/w Trash legs and disc assemblies	\$ 6,292
1100 Series	3 leg c/w Standard legs and disc assemb.	\$ 9,357
	4 leg c/w Standard legs and disc assemb.	\$10,986
1100 Series	3 leg c/w Trash legs and disc assemblies	\$ 9,880
	4 leg c/w Trash legs and disc assemblies	\$11,612
1500 Series	4 leg c/w Standard legs and disc assemb.	\$12,188
	5 leg c/w Standard legs and disc assemb.	\$14,274
1800 Series	6 leg c/w Trash legs and disc assemblies	\$24,680

TKC IMPLEMENTS (TULLOCH)

2 Point mounted mole plough	\$ 978.00
Series 980 Pan Buster - Chisel Plough	
3 tine 600mm spacing	\$ 3,495
5 tine 300mm spacing	\$ 5,145
7 tine 300mm spacing	\$ 6,996
9 tine 300mm spacing	\$ 9,020
11 tine 300mm spacing	\$ 10,795
Steel depth wheel assemblies per pair	\$ 600

AITCHISON

Frame Size	No. Tines 1.17 m Subsoiler	No. Tool Bars	Ex Wanganui	Ex Chch
	1	2	\$1,362	\$1,478
1.17 m	2	2	\$2,143	\$2,259
1.98 m	1	2	\$1,546	\$1,663
1.98 m	2	2	\$2,328	\$2,444
1.98 m	3	2	\$3,109	\$3,225

Superflow Chisel Plough

Frame 2.44 m, 2 tool bars,	4 Low Draft Tines	\$2,300	\$2,417
	5 Low Draft Tines	\$2,681	\$2,797
	4 Cushion Tines	\$2,379	\$2,497
	5 Cushion Tines	\$2,780	\$2,896

Frame 1.98 m, 3 tool bars	5 Low Draft Tines	\$2,890	\$3,065
	7 Low Draft Tines	\$3,609	\$3,784
	5 Cushion Tines	\$2,984	\$3,164
	7 Cushion Tines	\$3,788	\$3,963
Frame 3.05 m, 3 tool bars	9 Low Draft Tines	\$4,652	\$4,827
	11 Low Draft Tines	\$5,413	\$5,588
	9 Cushion Tines	\$4,831	\$5,006
	11 Cushion Tines	\$5,631	\$5,806
Attachments	Low Draft Tine		\$ 442
	Cushion Spring Tine		\$ 464
	Subsoil Tine		\$ 906
	Depth Wheel (Pair)		\$ 623
	Subsoiler Wing Assembly		\$ 194

2.18.10 Discs

REID AND GREY

2.7 m (9') Tandem	\$3,808.00
3.0 m (10') Tandem	\$4,016.00

COSGROVE

Trailing Discs	- 32 Blade	\$7,141.00
	- 36 Blade	\$7,984.00

DUNCAN

Standard Century Disc	
8' All Plain Blades	\$3,622.00
8' All Scalloped Blades	\$3,784.00
9' All Plain Blades	\$3,986.00
9' All Scalloped Blades	\$4,080.00
800 Mounted Disc	
7' All Plain Blades	\$4,022.00
7' All Scalloped Blades	\$4,209.00
8' All Plain Blades	\$4,192.00
8' All Plain Blades	\$4,319.00
9' All Plain Blades	\$4,279.00
9' All Scalloped Blades	\$4,437.00

2.18.11 Power Discs

GALLAGHER

	<u>Width</u>	<u>Recommended</u> <u>Tractor kW (HP)</u>	
F400 (4 discs)	.99m	15-22 (20-30)	\$5,625
F500 (5 discs)	1.24m	19-26 (25-35)	\$5,963
F700 (7 discs) c/w Wghts	1.75m	22-44 (30-60)	\$7,075
F800 (8 discs) c/w Wghts	2.01m	37-60 (50-80)	\$7,360

2.18.12 Cultivators

DUNCAN

630 Single Bar Cultivator (Grubber)

11 Tine, 3.0m (10')	frame c/w Steel Wheels	\$2,210
15 Tine, 3.6m (12')	frame c/w Steel Wheels	\$2,640
17 Tine, 4.1m (13'6")	frame c/w Steel Wheels	\$2,860
11 Tine, 3.0m (10')	frame less wheels	\$1,560
15 Tine, 3.6m (12')	frame less wheels	\$1,990

634 Rotacrumbler

2.4m (8')	23 Tines c/w crumbler	\$1,785
3.6m (12')	35 Tines c/w crumbler GP	\$2,235
4.3m (14')	41 Tines wideline	\$3,935
4.9m (16')	47 Tines wideline	\$4,292

660 Vibroflex Cultivator

9 Tine - 2.25m	\$3,090
13 Tine - 3.25m Heavy Duty	\$4,540
17 Tine - 4.25m Heavy Duty	\$5,112
Wing Assemblies (4 tines) per pair	\$ 986

CLOUGH

Standard Frame 925 Mini-Till Models.

	<u>With Crumbler</u>	<u>Less Crumbler</u>
1.6m 13 tine	\$1,266	\$ 856
2.1m 17 tine	\$1,394	\$ 961
2.6m 19 tine	\$1,468	\$1,013
Helper Tines	extra	\$ 9.25

923 Wide Line Trailing Maxi-Till

5.5m 54 tine	\$10,920	\$8,921
7.7m 70 tine	\$11,957	\$9,843

920 Mounted Maxi-Till Standard Models

2.53m 22 tine	\$1,785	\$1,170
3.63m 34 tine	\$2,230	\$1,549

940 Agritiller Coil Tine Cultivators

2.06m 9 tine	\$2,390	\$1,704
2.96m 13 tine	\$2,976	\$2,235
3.86m 17 tine	\$3,538	\$2,780

930 Uni-Tiller

3 tine standard	\$ 572
7 tine standard	\$ 889
11 tine with tortion bar	\$1,573

922 Mounted Maxi-Cult

2.45m 13 Tine	\$2,106	\$1,403
3.63m 21 Tine	\$2,574	\$1,799

AITCHISON

Easyflow Cultivators

	N.I.	S.I.
1.83m, 4 tool bars, 17 tines	\$1,092	\$1,140
With crumbler roller,	\$1,565	\$1,612
Roller kitset	\$ 542	\$ 563
3.05m, 4 tool bars, 29 tines	\$1,555	\$1,661
With crumbler roller	\$2,205	\$2,311
Roller kitset	\$ 748	\$ 770
4.26m, 4 tool bars, 43 tines		
With 3 crumbler rollers		
(fitted)	\$4,236	\$4,448

GALLAGHER

Ripper with Shakaerator

Frame complete with 3 pt linkage mountings	\$1,821
11" Skieth complete for short shank	\$ 263
Shakaerator unit with Driveshaft and clutch	\$ 922
21" Long Shank with Narrow Tip	\$ 595
15" Short Shank with Wide Tip	\$ 352

TULLOCH

350 Culti-leveller 19 flexi-tine

- with standard tines	\$7,065
- with Super Agrilla	\$7,445

TKC Series 920 Maxi-till cultivators crumbler

	With crumbler	Without crumbler
23 tine 2.4m	\$ 1,864	\$ 1,305
29 tine 3.0m	\$ 1,915	\$ 1,345
35 tine 3.6m	\$ 2,220	\$ 1,575
41 tine 4.2m	\$ 2,655	\$ 1,980

Series 923 Fully trailing maxi-till cultivator crumbler

50 tine 5.5m	\$10,410
60 tine 6.5m	\$11,350
64 tine 7.0m	\$11,585
70 tine 7.7m	\$11,850
82 tine 8.8m	\$12,500

Series 924 end tow hitch

35 tine 3.6m	\$ 3,715
41 tine 4.2m	\$ 3,890

Series 925 mini-till with crumbler		
13 tine	1.6m	\$ 1,295
17 tine	2.1m	\$ 1,395

2.18.13 Rotary Cultivators

GALLAGHER

Rototiller	30 complete with skids, .76m	\$2,849
	40 complete with skids, 1.02m	\$2,995
Lightweight Rotodisc		
Central Mounted c/w skids 1.30m		\$ 4,797
Central Mounted c/w skids 1.55m		\$ 4,975
Offset Mounted c/w skids 1.30m		\$ 4,838
Central Mounted c/w skids 1.55m		\$ 4,998
Heavy Duty Rotodisc		
Offset Mounted	1.52m	\$ 7,331
Central Mounted	1.52m	\$ 7,740
Central Mounted	2.03m	\$ 8,747
Central Mounted	2.29m	\$ 9,235

HOWARD (Inclusive of GST)

<u>HR30 Rotaharrow</u>	<u>1.80 m</u>	<u>2.00 m</u>	<u>2.30 m</u>	<u>2.55 m</u>	<u>3.05 m</u>
Trash Rotor c/w steel DCW	\$ 9,042	\$ 9,915	\$10,669	\$11,244	\$11,705
Trash Rotor c/w crumbler roller	\$10,648	\$11,009	\$11,844	\$12,543	\$13,233

<u>HR8 Rotovator</u>	<u>HR8/080</u>	<u>HR8/1.05</u>	<u>HR8/1.25</u>
540 pto - speed blade rotor			
Transmission rating 26kw			
C/W depth control skids	\$ 3,810	\$ 4,080	\$ 4,518

<u>HR11 Rotovator</u>	<u>HR11/155</u>
540 pto Transmission rating 37kw Standard Rotovator	\$ 5,359

<u>HR30 Rotovator</u>	<u>HR30/130</u>	<u>HR30/155</u>	<u>HR30/180</u>	<u>HR30/205</u>	<u>HR30/230</u>
540 or 1000 pto					
Standard Rotovator					
c/w steel D.C.W.	\$7,740	\$8,006	\$8,279	\$9,374	\$10,121
Standard Rotovator					
c/w crumble roller	\$9,371	\$9,644	\$9,986	\$10,468	\$11,296

<u>HR40 Rotovator</u> 1000 pto	<u>HR40/230</u>	<u>HR40/255</u>	<u>HR40/305</u>
Transmission rating 76kw			
Standard Rotovator c/w steel D.C.W.	\$16,463	\$17,379	\$18,281
Standard Rotovator c/w crumble roller	\$17,711	\$18,656	\$19,809

<u>HR50 Rotovator</u> 1000 pto			
Transmission rating 122kw			
Standard Rotovator c/w D.C.W.		\$31,909	\$37,697
Standard Rotovator c/w Crumble Roller		\$33,826	\$39,614

GALLAGHER

<u>Lightweight Rotohoes</u>		
Central Mounted with Skids	1.32 m	\$4,733
	1.57 m	\$4,891
Offset Mounted c/w Skids	1.32 m	\$4,622
	1.57 m	\$4,935
<u>Heavy Duty Rotohoe</u>		
Offset Mounted, Wheels	1.50 m	\$7,331
Central Mounted, Two Wheels	1.50 m	\$7,740
Central Mounted, Two Wheels	2.05 m	\$8,747
Central Mounted, Two Wheels	2.30 m	\$9,235

2.18.14 Power Harrows

Kuhn HR 250 Power Harrow	\$10,070
Kuhn HR 300 Power Harrow	\$11,833
Belrecolt HB3M Power Harrows	\$ 8,590
Belrecolt HB250 Power Harrows	\$ 7,830

HOWARD (Inclusive of GST)

<u>HR40 Rotoharrow</u>	<u>HR40/230</u>	<u>HR40/255</u>	<u>HR40/305</u>
Trash Rotor c/w pneumatic D.C.W.	\$17,420	\$18,316	\$19,287
Trash Rotor c/w crumble roller	\$18,668	\$19,615	\$20,815
Bar Rotor c/w pneumatic D.C.W.	\$16,955	\$17,941	\$18,981
Bar Rotor c/w crumble roller	\$18,204	\$19,240	\$20,508

2.18.15 Harrows (conventional):

DUNCAN (1985-86 prices)

<u>Zig-Zag Harrows</u>	1 leaf (less drawbar)	\$226
	4 leaf bar	\$211
Self-clearing Harrows	1 leaf (less drawbar)	\$175
	3 leaf bar only	\$228
	5 leaf bar only	\$330
Drill Covering Harrows	Single leaf (less bar)	\$119
	4 leaf bar and sliders	\$ 99
	3 leaves - bar and sliders	\$445
	4 leaves - bar and sliders	\$575
	5 leaves - bar and sliders	\$742
Finger Harrow Kits	15 Run	\$475
	19 Run	\$565
	23 Run	\$660

2.18.16 Rollers

Cambridge Rollers

8'	24" Rings and 2 1/2" axle	\$2185
9'	24" Rings and 2 1/2" axle	\$2400
10'	24" Rings and 2 1/2" axle	\$2685

Hydraulic Folding Cambridge Roller

Tulloch-Valderstad

Model HV6	6.2m working width, 3m transport, 3 sections, 105 Rings	\$121,475
HV10	10m working width, 3.1m trans., 5 sections, 175 Rings	\$23,450
HV12	12 m working width, 3.1m transport, 5 sections, 207 Rings	\$29,855

Field Roller

DUNCAN (1986 Prices)

2.7 m (9')	Standard Rings (630 mm/26")	\$3137
3.0 m (10')	Standard Rings (630 mm/26")	\$3352

Crumbler Roller

FECO PZ Crumbler 3000	\$6990
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Roller Seed Box

DUNCAN (1986 Prices)

2.7 m (9')	c/w Gears and Fittings	\$2113
3.0 m (10')	c/w Gears and Fittings	\$2236

2.18.17 Drills and Seed Boxes

DUNCAN (1986 Prices)

710 Agvance	15 Run Hoe Coulter	\$ 9,520
	19 Run Hoe Coulter	\$10,685
	23 Run Hoe Coulter	\$12,080
	15 Run Double Disc Coulter	\$10,985
	19 Run Double Disc Coulter	\$12,540
	23 Run Double Disc Coulter	\$14,330

AITCHSON

Seedmatic 1000 Series Linkage Drill -Seed Only		N.I.	S.I.
Model 1012	12 row 1.8m	\$6,237	\$6,522
Model 1016	16 row 2.44m	\$6,613	\$6,898

Seedmatic 1100 Series Linkage Drills - Seed and Fertiliser

Model 1112	12 row 1.8m	\$7,501	\$7,843
Model 1116	16 row 2.4m	\$5,079	\$8,421
Model 1120	20 row 3.0m	\$8,761	\$9,102

Seedmatic 1100 "T" Trailed Series

Model 1112T	12 row 1.8m (6') model	\$9,147	\$9,489
Model 1116T	16 row 2.4m (8') model	\$9,724	\$10,066
Model 1120T	20 row 3.0m (10') model	\$10,406	\$10,748

Seedmatic 1100 Coulter Trailed Drill

Model 1112CT	12 row 1.8m	\$11,568	\$11,910
Model 1116CT	16 row 2.4m	\$12,952	\$13,293
Model 1120CT	20 row 3.0m	\$14,432	\$14,782

SeedKing C.B. Trailed Endwheel Disc

16 row, Sowing width 2.24m, width 2.99m total	\$10,160	\$10,960
20 row, Sowing width 2.8 m, width 3.55m total	\$11,975	\$12,375
24 row, Sowing width 3.6 m, width 4.11m total	\$13,861	\$14,311

TULLOCH

Pneumatic Seed Drill

DL 3 m working width, 24 coulter, 3 point linkage	\$12,175
DL 4.5m working width, 32 coulter, row spacing 140mm	\$14,995
DT 6 m working width, 48 coulter, row spacing 125mm	\$26,590
DT 8 m working width, 64 coulter, row spacing 125mm	\$29,825

Seedbox (32 litre capacity)

DL models	\$1,295
DT models	\$2,590

2.18.18 Precision Drills

HOWARD

Handpush	Single Row	\$1,133
S981	3 Row	\$6,665
	4 Row	\$8,029
	5 Row	\$9,242
	6 Row	\$10,539
S981	Single Unit only	\$1,291

NODET

4 Row planter	\$14,079
6 Row planter	\$17,312

2.18.19 Transplanters

HOWARD

MT Model 4000	\$4,036
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2.18.20 Fertiliser Spreaders and Topdressers Manure Spreaders

KUHN

Fertiliser Spreader c/w Agitator	\$3,560
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AITCHISON INDUSTRIES

ex Wanganui

Oscillating Pipe-Mounted

SP400 Capacity 350 kg	\$2,068
SP500 Capacity 500 kg	\$2,307
SP600 Capacity 600 kg	\$2,400
SQ600P	\$2,890
SQ800P Capacity 920 kg	\$3,185
SQ1000P Capacity 1130 kg	\$3,305

Precision Spinner, Mounted

SN400 Capacity 350 kg	\$1,584
SN500 Capacity 500 kg	\$1,823
SN600 Capacity 600 kg	\$1,916
SQ600N	\$2,493
SQ 800N Capacity 920 kg	\$2,788
SQ1000N Capacity 1000 kg	\$2,908

Economy Spinner "Zero" Mounted	\$1,138
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FECO

Vibrax 600 litre (10-12 cut)	\$2,995
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2.18.21 Windrowers

HESSTON (1986 Prices)

Model 1014	3.6 m Header, Hydraulic Drive	\$20,820
	Conditioner for 1014	\$ 2,750

2.18.22 Choppers and Shredders

TULLOCHS

Brady 722 Multi Crop Shredder

1800 mm - trailing, shredder plate	
discharging under	\$10,895
with short deflector hose behind	\$10,965
3600 mm - Trailing	\$16,890
4200 mm - Trailing	\$19,255

FECO Maize Choppers

MH 80 S (Single Row)	\$ 7,250
MH 160 SU (Double Row)	\$22,500
MH 160 S (Double Row)	\$18,990

2.18.23 Mowers

KUHN

GMD 44 Multi-Disc Mower	- Manual	\$4595
	- Manual Heavy Duty Disc	\$4871
	- Hydraulic	\$4830
	- Hydraulic Heavy Duty Disc	\$5120
GMD 55 Multi-Disc Mower	- Hydraulic	\$5750
	- Hydraulic Heavy Duty Disc	\$6095
GMD 66 Multi-Disc Mower	- Hydraulic	\$6150
	- Hydraulic Heavy Duty Disc	\$6519
FA367 Sicklebar Mower		\$2935

RONSON

Trailed 3 gang mower	\$11,337
Mounted 3 gang mower	\$11,705
Trailed 5 gang mower	\$15,612
Trailed 7 gang mower	\$22,785

TULLOCHS

JF CM 165 Drum Mower	5'6" cut	\$ 2,785
JF CM 166 Drum Mower	5'6" cut	\$ 3,200
JF CM 166C Drum Mower, Flail Crimper	5'6" cut	\$ 4,900
TM 4/2790, 9' Drum Mower, Swathing Attach.		\$13,350
Comet Mower, Twin Drum, 2m cut, V Belt Drive		\$ 3,445

<u>CLAAS</u>		
Rotary WM30	2.45 m	\$7,995

FECO

CM 135	Cyclomower	\$ 1,990
CM 165	Cyclomower	\$ 4,395
CM 185	Cyclomower	\$ 5,990
CM 185 HYD	Cyclomower	\$ 7,395
CM 210	Cyclomower	\$ 7,945
CM 211	Cyclomower	\$ 6,995
CM 265A	Trailed Drum Mower	\$16,900
Falazet DM 185	Disc Mower	\$ 6,995
Falazet DM 230	Disc Mower	\$ 6,599

WESTWOOD

Slashers

B1100	1.1m cut	\$1,740
B1200	1.2m cut	\$1,690
B1500	1.5m cut	\$2,130

2.18.24 Mower Conditioners

FECO

Falazet FZ 275C	\$20,990
Falazet FZ 275T	\$19,750
Falazet FZ 320C	\$23,990
Falazet FZ 320T	\$23,750

Conditioners to fit Zweeger mowers

TK 165 Trailing	(For CM 165)	\$ 990
TK 185 Hydraulic	(For 185 HYD)	\$ 2,890
TK 211	(For CM 211)	\$ 3,150
TK 210 Trailing	(For CM 210 or DM 230)	\$ 2,999
Condizet 185H	(For CM 185H)	\$ 4,750
Condizet 185	(For DM 185)	\$ 4,450
Condizet 230	(For DM 230)	\$ 5,490

TAARUP

305	\$ 8,875
306	\$16,455
307	\$18,198

Mulchers

SKT1500	\$ 5,100
SKT2100	\$8,173

KUHN

FC 200 3 pt linkage	\$ 9,750
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FC 300 ML	\$19,250
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TULLOCHS

JF CMT 245c 2.4m cut with fail conditioner	\$14,775
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AM201 C, tractor mounted, 2.00m, 5 discs, conditioner	\$ 9,845
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AM241 C, tractor mounted, 2.40m, 6 discs, conditioner	\$14,185
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CLAAS

WM 24C 1.85 m	\$ 6,495
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2.18.25 Mower Toppers, Slashers

FECO

Front mounted mowers

CM 211F	\$ 8,850
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CM 265F	\$10,950
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GILTRAP

Model 1500	1.5m cut 4 blade	\$ 2,175
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2700	2.7m cut 2 rotor flexiframe	\$ 4,250
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GALLAGHER

Rotoslasher

Up to 22 kW (30 hp),	1.12 m	\$ 1,849
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Up to 45 kW (60 hp), c/w 2 blades	1.51 m	\$ 2,849
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HOWARD

RP60 1.52m blade cutting head	\$ 3,724
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Rollascythe RPR

RP60 1.52m 4 blade cutting head	\$ 4,594
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Rotoslasher RS (single speed gearbox)

540 pto - no maximum kw limit

RS60 1.52m c/w 2 blade cutting head	\$ 4,736
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RS60 1.52m c/w 3 blade cutting head	\$ 5,222
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RS72 1.83m c/w 2 blade cutting head	\$ 4,785
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RS72 1.83m c/w 3 blade cutting head	\$ 5,454
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Selectacut (Gearbox models)

540 or 1000 pto - no maximum kW limit

RS60 1.52m c/w 2 blade cutting head	\$ 6,357
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RS60 1.52m c/w 3 blade cutting head	\$ 6,589
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RS72 1.83m c/w 3 blade cutting head	\$ 7,258
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PZ BINGO

Rotary Mowers and Pasture Toppers

PT 4 T.P.L.	(360 cm)	\$ 5,990
PT 4 Trailing	(360 cm)	\$ 7,380
Bingo 2 T.P.L	(175 cm)	\$ 4,100
Bingo 3 T.P.L	(255 cm)	\$ 4,990
Bingo 3 Trailing	(255 cm)	\$ 6,380

2.18.26 Hay Conditioners

KUHN

GA 300	Gyrotedder	\$ 3,675
GA 402	Gyrotedder	\$ 5,330
GRS 24	Gyrotedder	\$ 5,525
GRS 25	Gyrotedder	\$ 4,655
GF 452T	Gyrotedder	\$ 3,465

FECO

Tedders and Rakes

Haybob		\$ 4,395
Haybob 300		\$ 4,795
HS 360 Grasspa		\$ 5,495
DS 5000 Maxibob		\$ 9,650
CZ 330 Rake		\$ 1,250
HS 480 Tedder		\$ 3,950

WESTWOOD

Ride on Mower

T1100	11 HP Petrol	\$ 5,230
T1200	7 1/2 HP Diesel	\$ 5,753
T1600	16 HP Petrol	\$ 6,270

TULLOCHS

3.35 m width, trailed, V Belt Drive		\$ 3,100
JF Rotary Tedder, Mounted,	3.2 working width	\$ 4,825
	4.0 working width	\$ 5,985

TULLOCH - KVERNELAND

Standard Buckrake	1100mm	5.0 kg tines	\$ 1,565
	1400mm	5.7 kg tines	\$ 1,695

Heavy Duty industrial push off rakes	\$ 4,485
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2.18.27 Conventional Balers

WELGER

AP 53	\$23,990
AP 63 (including hydraulic drawbar)	\$19,990
AP 71	\$18,750
AP 73	\$28,990

TULLOCHS

Jones 155 Pickup Baler, 56" Pickup	\$18,985
Jones 160 Pickup Baler, 60" Pickup	\$20,905

HESSTON (1986 Price)

Beeline Baler, c/w bale tensioner and bale chute	\$16,800
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2.18.28 Big Balers

CLAAS

Square Balers	Markant 55 Bale chamber 460 x 360	\$18,500
	Markant 65 Bale chamber 460 x 360	\$19,635

JOHN DEERE

456 Square Baler	\$12,200
550 Round Baler	\$13,700

FECO

Roball 1512 Round Baler	\$27,900
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HESSTON (1986 Price)

Rounder bale counter, density plus kit	\$ 26,995
Electric tie, extra shields	\$ 2,509

INTERNATIONAL

AIC RC121	\$25,720
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WELGER

Belt type:	RP 150	\$15,990
	RP 180	\$28,990
Roller type:	RP 12 with base ejector, twine tie	\$19,999
	RP 15 with base ejector, twine tie	\$20,999
	RP 12 with base ejector, plastic wrap	\$22,799
	RP 15 with base ejector, plastic wrap	\$23,799
Giant Square Baler Delta 5000		\$165,000

VEREER

504 HE	5 x 4	\$23,990
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HAYLINE

550	Round baler	\$27,000
456	Baler	\$17,800

TULLOCHS GEHL

<u>Gehl Bale BB1860 5' x 6' bale</u>		
Round baler	1460 3'9" x 5' bale up to 1000lbs	\$29,995

TULLOCHS-KRONE

<u>Round balers</u>		
KR 100	1000 x 1200mm bale	\$20,375
KR 125	1200 x 1200mm bale	\$27,725
KR 155	1500 x 1200mm bale	\$26,215
KR 180	1800 x 1500mm bale	\$29,250

CLAAS

Round Balers	Rollant 44, Bale chamber 1.2 m x 1.2 m	\$17,600
	Rollant 62, Bale chamber 1.6 m x 1.2 m	\$19,995
	Rollant 85, Bale chamber 1.8 m x 1.5 m	\$23,400

DUNCAN INDUSTRIES LTD (1985-86 Prices)

Std 3 point (motor mounted) forks (1200 kg capacity)	\$3,785
Heavy duty 3 pnt (motor mntd) forks (1600 kg capacity)	\$4,020
Heavy duty 3 point forks	\$3,880
Standard side feeder unit only	\$3,180
Heavy duty - 2 bale side feeder and transporter	\$5,997
Heavy duty - 3 bale side feeder and transporter	\$6,840

Baling Twine

Heavy Sisal	\$163.90/Bale
Medium Sisal	\$148.00/Bale
Super Film Propylene	\$125.74/Bale
Binder Twine (Untreated Sisal Twine)	\$131.20/Bale
Big Round Super Film Baler Twine	\$158.17/Bale

2.18.29 Hay Handling Equipment

<u>GARTH D. STEWART</u>	Price	GST	Total
8 Bale Accumulator Kitset	\$2,455	245.50	2700.50
8 Bale Accumulator Complete	\$2,455	245.50	2700.50
10 Bale Accumulator Complete	\$2,644	264.40	2908.40
12 Bale Accumulator Complete	\$2,755	275.50	3030.50
8 Bale Impaler Bale Loader c/w ram	\$1,434	143.40	1577.40
8 Bale Impaler c/w ram heavy duty	\$1,469	146.90	1615.90
8 Bale Impaler clamp action 3 pt linkage cw ram	\$1,281	128.10	1409.10
10 Bale Impaler c/w ram	\$1,719	171.90	1890.90
12 Bale Impaler c/w ram	\$1,864	186.40	2050.40

2.18.30 Silage Handling Equipment

GARTH D. STEWART

	Price	GST	Total
4 in 1 Frame and tynes silage	\$1148	114.00	1262.00
4 in 1 Frame, tynes, grab and ram	\$1654	165.40	1819.40
4 in 1 Frame Big Bale forks	\$ 961	96.10	1057.10
4 in 1 Frame and Pallet forks	\$ 931	93.10	1024.10
4 in 1 Frame c/w mounting brackets	\$ 646	64.60	710.60
Tynes (8) silage HT 38mm	\$ 502	50.20	552.20
Grab and hydraulic ram - silage	\$ 506	50.60	556.60
Big Bale forks HT 50mm	\$ 315	31.50	346.50
Forklift tyres	\$ 285	28.50	313.50
Silage teeth for Front end loader bucket	\$ 268	26.80	294.80

GILTRAP

		N.I.	S.I.
Harvesting Loaderwagon	22 cubic metres	\$23,100	\$29,000
	30 cubic metres	\$26,680	\$27,580

Front-centre Feed wagons

Model 25 pto or hydraulic - 3.75 cu.m	\$ 7,200	\$ 8,000
40 Economy pto or hydraulic - 6 cu.m	\$ 7,200	\$ 8,000
40 Standard pto or hydraulic - 6 cu.m	\$ 8,500	\$ 9,350
40 Super hydraulic only - 6 cu.m	\$ 8,800	\$ 9,650
50 Standard pto only - 8 cu.m	\$ 9,050	\$ 9,900
50 Super hydraulic only - 8 cu.m	\$ 9,450	\$10,300
65 Standard pto only - 10 cu.m		
- on tandems	\$11,890	\$12,790
65 Standard hydraulic only - 10 cu.m		
- on tandems	\$12,480	\$13,380

GILTRAP/GALLAGHER COMBINATIONS

All feedwagon combinations have Fast Floor, 'Super' Hydraulic System, Remote Controls, Roof and Cover.

		Less Here Ram, Hoses & Roof	Gallagher Multicut 1.37m	Forager Finecut 1.37m
Model 40HC self-feed	- 8.75 cu.m			
as harvesting wagon	- N.I.	\$ 9,460	\$18,184	\$17,840
	- S.I.	\$10,310	\$19,034	\$18,690
Model 50HC self-feed	-11.94 cu.m			
as harvesting wagon	- N.I.	\$10,100	\$18,824	\$18,480
	- S.I.	\$10,950	\$19,674	\$19,330

Model 65HC self-feed	-15.5 cu.m			
as harvesting wagon	- N.I.	\$12,980	\$21,704	\$21,360
	- S.I.	\$13,880	\$22,604	\$22,260

Model 45XHC self-feed cross conveyor				
- 11 cu.m as harvesting wagon				
	- N.I.	\$13,130	\$21,854	\$21,510
	- S.I.	\$13,980	\$22,704	\$22,360

KUHN

DD 1500 Silage Handler			\$ 8,057
DD 1700 Silage Handler			\$ 9,237
DD 200 Silage Handler			\$10,417
B1201E Silage Blockcutter c/w elevator			\$ 6,900

TULLOCH

Forage wagons 685 double oscillating	6 tonne	\$10945
(centre drop) single axle	4 tonne	\$ 9985
tandem axle	6 tonne	\$11220
(side delivery) 685 single axle	4 tonne	\$10175
dual oscillatng axle	6 tonne	\$11935
tandem axle	6 tonne	\$12210

2.18.31 Grain Handling Equipment

Grain Dryers (1986 Prices)

MORRIDGE

Model 840	\$35,000
Model 880 700	\$60,000

2.18.32 Feed Mixers

Farm Hand

817 Grinder/Mixer	\$18,100
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2.18.33 Chainsaws, Bushcutters, Hedge Trimmers

Where chainsaws have variable bar lengths available, price quoted is for smallest bar.

STIHL

009 EQ	37 cc	4.0 kg	\$ 462
010 AVEQ	37 cc	4.3 kg	\$ 495
011 AVEQ	41 cc	4.4 kg	\$ 583
011 AVTEQ	41 cc	4.3 kg	\$ 550
020 AVSEQ	35 cc	4.4 kg	\$ 946
024 AVSEQ	44 cc	4.6 kg	\$ 825
028 AVSEQ	51.5 cc	5.6 kg	\$ 902
034 AVEQ	56.4 cc	5.3 kg	\$ 979
038 AVSEQ	67 cc	6.6 kg	\$1023
038 AVMEQ	72 cc	6.6 kg	\$1122
048 AVEQ	76 cc	7.7 kg	\$1221
051 AVEQ	89 cc	10.1 kg	\$1380
056 AVSEQ	87 cc	8.2 kg	\$1320
076 AVEQ	111 cc	10.5 kg	\$1595
070 AV	106 cc	11.8 kg	\$1780
090 AV	137 cc	12.6 kg	\$1969

HUSQVARNA

40	40 cc	13"-18"	\$ 569
44	44 cc	13"-18"	\$ 679
50	48.7 cc	13"-18"	\$ 680
61	61.5 cc	13"-22"	\$ 803
154 SE/SG	54.2 cc	13"-18"	\$ 838
181 SE/SG	81.0 cc	16"-22"	\$1046
266 SE/SG	66.7 cc	13"-26"	\$ 921
238 SE/SG	38 cc	11"-15"	\$ 752
2100 CD	99.0 cc	18"-28"	\$1194

AGRISALES (Komatsu and Zenoah)

Chainsaws		Bar Length	
G320AV	31.7 cc	14"	\$ 461.00
G380AV	37.5 cc	16"	\$ 515.00
G405AV	39.4 cc	18"	\$ 702.00
G560AV	52.3 cc	18"	\$ 834.00
G620AV	62.0 cc	20"	\$ 892.50

Brushcutters/Trimmers

BC174E	17.2 cc	c/w Auto Nylon cord Head/Grass Blade	\$ 411
BC245E	25.4 cc	c/w Auto Nylon cord Head/8 Tooth Eddy Blade	\$ 420

FBC221	37.4 cc	c/w Eddy Blade	\$ 645
FBC33-L	52.5 cc	c/w 1x8 Tooth Eddy Blade 1 x Circular Saw Blade 1 x Safety Guard 1 x Harness	\$ 855
BK340FT	33.6 cc	Knapsack Brushcutter c/w 8 Tooth Eddy Blade	\$ 575
BC340DWM	33.6 cc	c/w 1x8 Tooth Eddy Blade and Shoulder Harness	\$731.50
BC430DWM	41.5 cc	c/w 1x8 Tooth Eddy Blade and Shoulder Harness	\$971.50
Hedgetrimmer HT230A	22.5 cc	With 750mm Blades	\$459.50
PARTNER (Inclusive of GST)			
Model 400	40 cc	13"-15"	\$571.00
500	49 cc	13"-18"	\$660.00
565	65 cc	15"-18"	\$755.00
5000	49 cc	13"-18"	\$821.00
7000	70 cc	15"-24"	\$909.00
350	34 cc	12"-16"	\$396.00
1400 EL	1400 watts	13"-15"	\$278.00

2.18.34 Portable Generators and Welders

LINCOLN ELECTRIC

Selfwelder 140 I.C.	\$ 592.00
AC225S (240 volt)	\$ 835.00
AC225S (415 volt)	\$ 845.00
Tractapac (basic)	\$1385.00
Trailer for Tractapac	\$1231.00
Weldanpower 175 Petrol	\$2727.00
Weldanpower 175 Diesel (electric start)	\$4460.00
Weldanpower 225 Petrol	\$4871.00
Weldanpower 225 Diesel	\$6286.00
Dis-gen 6.5 KVA (Basic)	\$7849.00

HOWARD

Multiwork Welder/Generator

Multiwork B/130 c/w welding kit	\$2,421.00
2 kw Generator at 220v A.C. 130AMP D.C. welder.	
Multiwork 170 c/w welding kit	\$3,082.00
3 kw Generator at 220v A.C. 170AMP D.C. welder.	

2.18.35 Spray Equipment

Tanks and Sprayers

F.M. WINSTONE LTD

100 l Sprayer	- No Pump	\$ 618
100 l Sprayer	- C/W model 215 petrol	\$1,585
100 l Sprayer	- C/W model 215 electric	\$1,515

Econo Sprayer 500 litre, 3 pt linkage, \$ 770

Sprayers Pasture Pak	525 litre c/w Mesoliti AZ 90 pump	\$3,383
	700 mm fan and AZ 90 pump	\$5,446
	800 mm fan and AZ 90 pump	\$5,986

'SPRAYRITE' (1986 Prices)

Polythene	200 litre with 3 pt linkage	\$ 518.00
	500 litres freestanding tank	\$ 746.00
	With 3 pt linkage frame	\$ 776.00
	700 litres with 3 pt linkage	\$ 989.00
	Skid Tanks	\$1110.00

Spray Pumps

F.M. WINSTONE

Hypro	N6400 39 litre/minute (P.T.O.) complete	\$ 273.00
	Centrifugal 290 litres/minute (P.T.O.)	\$ 590.00

Flojet electric pumps

model 25062/2	12.5 litres/minute	\$ 238.00
2000/650		\$ 266.00

Comet	MP/20	20 litres/minute (complete)	\$ 506.00
	AZ30	30 litres/minute	\$1760.00
	AZ90	102 litres/minute	\$1385.00
	AZ120	140 litres/minute	\$1850.00
	P48	51.7 litres/minute (incl. petrol eng.)	\$2228.00
	P68	74 litres/minute (P.T.O.)	\$ 865.00
	BP60/20	64.2 litres/minute (P.T.O.)	\$ 795.00
	BP105/20	200 litres/minute	\$2925.00

'SPRAYRITE' (1986 Prices)

Bertolini 36S	W.P. = 3400 kPa; O/put = 36 l/min	\$ 675
Bertolini 55S	W.P. = 4000 kPa; O/put = 55 l/min	\$ 735
Bertolini 85S	W.P. = 4900 kPa; O/put = 85 l/min	\$ 1190
Bertolini 110S	W.P. = 6370 kPa; O/put = 110 l/min	\$ 1586
Bertolini 140S	W.P. = 6500 kPa; O/put = 140 l/min	\$ 1895

Plunger Pumps	Bertolini Models	740-140 l/min	\$944-\$1,1678
Press. Wash Pumps	Bertolini Models		\$603-\$838

Spray Booms

F.M. WINSTONE

3m straight boom, 9 Prec. nozzles, 3m 13 mm hose	\$ 180
6m Artic. boom, 15 Prec. nozzles, 6m 13 mm hose	\$ 699
10m Artic. boom, 25 Prec. nozzles, 13 mm cncgt hose	\$1098
12m Artic. boom, 2 series nozzle system	\$2500

'SPRAYRITE'

3.5 m straight boom, electro-galvanised tubing	\$ 154
6 m boom	\$ 741
10 m booms	Standard \$1552
	Heavy duty manual folding \$2140
	Heavy duty hydraulic folding \$4565
	Heavy duty electric folding \$4985
12 m booms (Heavy duty)	
	Manual folding \$2422
	Hydraulic folding \$4797
	Electric folding \$5185

Hose Reels

F.M. WINSTONE

Holds 100 m of 13 mm hose or 110 m of 10 mm hose	\$345.00
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'SPRAYRITE' (1986 Prices)

Holds 100 m of 10 mm hose or 100 m of 10 mm hose	\$312.54
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Hoses

F.M. WINSTONE

Kuraray hose	10 mm, 4000 kPa	\$ 4.60/m
Kuraray hose	13 mm, 4000 kPa	\$ 6.75/m
Suction hose	19 mm, 2000 kPa (rubber)	\$17.00/m
Suction hose	25 mm, 1300 kPa (rubber)	\$19.00/m
Bypass hose	13 mm, 680 kPa (plastic)	\$ 2.75/m
Bypass hose	19 mm, 350 kPa (plastic)	\$ 4.35/m
Suction hose	25 mm, 680 kPa (plastic)	\$ 8.60/m
Suction hose	19 mm, 1500 kPa (plastic)	\$ 8.40/m
Suction hose	25 mm, 975 kPa (heliflex)	\$16.50/m
Suction hose	38 mm, 725 kPa (heliflex)	\$25.50/m

SPRAYRITE (1986 Prices)

13 mm Tres Noble HP hose	\$ 5.85/m
19 mm Neoprene lined rubber suction hose	\$12.30/m
25 mm Neoprene lined rubber suction hose	\$16.20/m
25 mm Heliflex hose	\$22.73/m

Spray Guns

F.M. WINSTONE

200 litre spray pistol	\$ 79.00
Spray Gun Art 25	\$125.00
Maxi Gun	\$150.00
Mini Gun	\$ 95.00
Lancer Gun	\$118.00

SPRAYRITE (1986 Prices)

Pistol	\$ 66.00
Long barrel pistol	\$ 49.50
Variable Hand control	\$ 86.80

Control Units

F.M. WINSTONE

MK V Unit	\$ 85.00
Remote 3 way outlet (248)	\$130.00
B.P. Series 4 outlet	\$175.00
Winstone Select	\$195.00

Pressure Gauges

Range from 0-1000 kPa to 0-6000 kPa entry	\$27.00
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SPRAYRITE (1986 Prices)

New Bertolini unit, maximum delivery 120 litre/min	\$146.25
Polmac 5 pnt direction cont, Capacity to 120 lt/min	\$295.50

Strainers

Footstrainer 19 mm	\$10.50
Line Filter - Fine, Coarse and Medium	\$34.00

Nozzles and Tips

F.M. WINSTONE

Spray tip (Gun)	\$ 1.00
Lurmark tips - 110 deg., 80 deg., all sizes	\$ 2.00
Lurmark and Delavan brass off (off centre)	\$ 6.00

Measuring Jugs

1.5 litre Clear	\$ 7.00
Maxi Measure Jug	\$16.50

Knapsacks

SOLO (1986 Prices)

Manual	- 425, piston model, 90 p.s.i.	\$191.00
	- 475, diaphragm, 30 p.s.i.	\$191.00
Motorised	- 10 litre tank, 35 cc engine	\$589 to \$749

2.19 MICRO-COMPUTERS

2.19.1 Farmers Requirements

A survey carried out in Australia two years ago gave the following farmer ranking of the future uses of their on farm computer. These are, in decreasing order:

- Farm financial record-keeping/analysis.
- Farm physical record-keeping/analysis.
- Farm decision analysis, e.g. investment analysis, linear programming, etc.
- Breeding records.
- Communication with other computers to gather information; or
- Communication with other computers to execute market transactions, e.g. order machinery parts, sell produce, etc.
- Games for teaching and family use.

2.19.2 Guides for Purchasing a Farm Micro-Computer

Three questions should be answered before making a final decision to purchase a micro-computer. These are:

- What are the current requirements and problems on the property?
- Can these be best fulfilled or overcome using a micro-computer or are there other least cost alternatives available, e.g. secretarial services or mail-in services?
- The final question is - the choice of system to be purchased. This final question will be discussed under the following three headings.
 - General Criteria.
 - Hardware.
 - Software.

General Criteria.

What is the total price of the complete system installed on the property, in working order?

What are the repayment terms and conditions of contract?

What assurances are given regarding delivery, and installation dates, guarantees and maintenance.

What is the cost of the service contract after the warranty expires?

Is the dealer likely to stay in business?

If programs are especially written for you, who owns them? Can copies be sold to third parties?

Is the firm's hardware and software likely to change? What is the fully maintained life expectancy of their products?

Hardware

Is there sufficient capacity, in terms of memory and permanent storage, to handle the data to be processed? This is particularly important as the operating system and language reduce the usable memory.

Has the particular make and model of computer got a good name for reliability?

In the event of a breakdown how quickly can the machine be repaired, i.e. does the dealer stock spare parts?

Is replacement equipment provided while yours is being repaired?

Is the printers speed and quality suitable for your requirements?

Software

Are the programs written in a language which the computer can handle?

Do the programs meet the requirements of the farm or farmer?

Are the programs technically correct?

Are the programs user orientated?

Is there adequate back-up support if problems occur, or the farmer changes his policy or legislation changes, e.g. tax changes?

Are the data required to run the programs readily available?

Can a farmer write the programs himself?

2.19.3 General Guidelines

One of the most important criteria is the available memory after loading the operating system: -

1. Require at least 64K RAM (random access memory) in an 8 bit machine or 128K for a 16 bit computer.

Complete System	\$2500
(extra files for deer etc)	\$ 250

TE RANGI SOFTWARE COMPANY

Kaypro Computer	
Goat breeding Systems	\$1000

LIVEWARE ASSOCIATES LTD

(Apricot)	
Deer herd Management System	
Various modules starting at	\$950

2.19.6 The Kellogg Farm Management Unit

The objective of the Unit is to develop and support computer based management aids which are designed to assist producers and rural communities in the efficient use of their limited resources.

Packages have been designed for recording and analysis of transaction and production data for almost any type of farming system. Budgeting is also a prominent part of computer use.

The Unit also runs educational workshops and seminars for farmers and is generally involved in computer awareness programs.

Any further inquiries should be addressed to:

The Head
Kellogg Farm Management Unit
Lincoln College
Canterbury

2.20 BUILDINGS

2.20.1 Dwellings

New cost varies considerably but is approximately \$700 per square metre for an average farm homestead.

Cottages

PROFILE BUILDINGS LTD

Note: Prices are inclusive of GST

		<u>Basic Price</u>		<u>Standard Plumbing</u>	<u>Total</u>
2 Bedroom	Option 1	\$20764.20	)		\$25301.20
	Option 2	\$25033.80	)	\$4537.00	\$29570.80
	Option 3	\$36933.60	)		\$41470.60
3 Bedroom	Option 1	\$26270.20	)		\$30807.20
	Option 2	\$36020.30	)	\$4537.00	\$45094.30
	Option 3	\$48378.00	)		\$52915.00

Note:

Option 1 provides a wooden floor, exterior framing, roof, aluminium joinery, exterior cladding and ceiling battens.

Option 2 provides a wooden floor, exterior framing, roof, aluminium joinery, exterior cladding, internal Trower partitioning, doors and ceiling battens.

Option 3 provides a wooden floor, exterior framing, roof, aluminium joinery, exterior cladding, internal Trower partitioning, doors, ceilings, door handles/catches, gib-stopping, plumbing, electrical, internal painting, shelving, external steps and external skirting.

ECONOTEK

20 men Shearers Quarters

\$485.00/m²

2.20.2 Garages

PROFILE BUILDINGS LTD

Note: Prices are GST inclusive, and allow for coloursteel pre-painted exterior, doors, windows, tilt-a-door, all framing and construction. Concrete floors based on clear, level, accessible sites within a radius of 24 km from the Christchurch Post Office. Outside of this radius a small travelling charge would be made.

6.0 m x 3.6 m Single Garage	\$4623.00
6.0 m x 4.8 m Garage Workshop	\$5441.00
6.0 m x 6.0 m Double Garage	\$6377.00
9.0 m x 6.0 m Double Garage Workshop	\$8371.00
Multi Bay Garages ranges from 3 bay standard	\$9524.00

2.20.3 Sleepouts

PROFILE BUILDINGS LTD

3.0 m x 3.0 m (10 x 10)	\$4753.00
3.0 m x 3.6 m (10 x 12)	\$5064.00
3.6 m x 3.6 m (12 x 12)	\$5380.00
4.2 m x 3.0 m (14 x 10)	\$5380.00
4.2 m x 3.6 m (20 x 12) - 2 Bedroom	\$8830.00

2.20.4 Woolshed/Covered Yards

Prices vary considerably depending on what individual farmer requires.
The following prices must be taken only as a guide.

Woolshed:

BROWNBUILT

3-bay shed	- kitset	\$34000
5 bay extra wide yards	- kitset	\$23700
5 bay standard yard	- kitset	\$14600

ECONOTEK

<u>No. of Stands</u>	<u>Cost/m</u>	<u>Average cost/m</u>
1 - 2	\$275-\$330	\$305
3 - 4	\$230-\$260	\$245
5 - 6	\$220-\$240	\$230

Also Grating beneath wool room - \$65/m²

Total cost of new woolshed excluding contents:

<u>No of Stands</u>	<u>1-2</u>	<u>3-4</u>	<u>5-6</u>	<u>8</u>
Size (metre)	9.0 x 7.0	18.0 x 8.3	18.0 x 13.5	22.5 x 18
Area (metre ²)	63	167.4	243	405
Nightpen Grating	4.5 x 7.0	9.0 x 9.3	9.0 x 13.5	9.0 x 18
Basic Shed	\$20800	\$43500	\$55800	\$95700
Nightpen Grating	2000	5500	8000	10500
Smoko Room	850	1800	3700	5400
Cartage	1100	1700	2100	3100
Electrical	900	1400	1900	3000
Plumbing	700	900	1100	1400
Intrnl Painting	700	1400	1600	1900
	<u>\$27050</u>	<u>56200</u>	<u>\$74200</u>	<u>\$121000</u>

Covered Yards

Vary from \$70 to \$103/m² (excluding cartage, plumbing).

2.20.5 Sheep Yards

Vary markedly - guide

\$5500 - \$11000

2.20.6 Cattle Yards

Building costs: 50' x 40'

\$6,500

Includes portable ramp

2.20.7 Deer complex building costs:

Includes pen

\$6,500 - \$10,000

2.20.8 Dairy Sheds

The cost of building dairy sheds vary considerably depending on type of dairy operation, availability of materials and labour, building site (completely new or conversion of existing shed), access to electricity and water, to name but a few factors.

ALFA-LAVEL

ROTARY DAIRIES

Ardco - Milking systems from Alfa-Lavel (without platform)

	HP102	EP100
16 Unit	14 190	18 304
20 Unit	16 005	20 625
24 Unit	18 271	23 661
28 Unit	20 383	26 268
32 Unit	31 372	35 002
36 Unit	33 561	37 534
40 Unit	35 684	39 985
48 Unit	40 183	45 639

Turnstyle

Conventional platform milking systems

	HP102	EP100
16 Unit	15 488	19 569
20 Unit	17 556	22 132
24 Unit	19 932	25 278
28 Unit	22 649	28 633
32 Unit	24 981	31 460
36 Unit	27 126	34 111
40 Unit	29 480	36 971

Open centre milking systems

	HP102	EP100
28 Unit	24 904	30 734
32 Unit	26 862	33 198
36 Unit	29 106	35 948
40 Unit	34 738	41 524
50 Unit	40 370	48 543
60 Unit	46 420	55 825

2.20.9 Haybarns/Implement Sheds

BROWNBUILT

Implement Shed

Wide span lean-to

single bay	9.8m x 7.7m x 3.3m	\$ 6,845 (kitset)
3 bay	29.5m x 7.7m x 3.3m	\$15,989 (kitset)

Multi-purpose Gable

3 bay	14.52m x 9.3m x 3.52m (tot. encl.)	\$11,353 (kitset)
3 bay	14.52m x 11.4m x 4.32m (tot. encl.)	\$15,989 (kitset)
15 m clear span steel building		
18.0m x 15.0m x 5.0m		\$31,910 (kitset)

ECONOTEK:

Hay Shed

Frame and roof only	\$60 - \$105/m ²
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Enclosed on three sides	\$135/m ²
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Implement Shed

Frame, roof and enclosed on 3 sides	\$135 - \$170/m ²
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Complete with doors	\$165 - \$210/m ²
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2.20.10 Packing Sheds

ECONOTEK

Basic shed - roof, frame, walls, door, concrete floor	\$180 - \$225/m ²
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Additional - mezzanine floors, ablution and smoke area	\$ 75 - \$105/m ²
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2.20.11 Killing Shed

HUMES

Circular - 2.5m I.D.	\$2,204.95
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MCKENDRYS

<u>Square</u>	<u>Diameter</u>	<u>Height</u>	<u>Price</u>	<u>G.S.T.</u>	<u>Total</u>
	8 ft. (2.44m)	8 ft. (2.44m)	1550.00	155.00	1705.00
<u>Round</u>					
Large	9' 3" (2.82m)	8' 6" (2.58m)	1530.00	153.00	1683.00
Medium	8' 6" (2.54m)	8' 6" (2.54m)	1400.00	140.00	1540.00
Small	6' (1.83m)	6' (1.83m)	1200.00	120.00	1320.00
Special Heavy Shelf			120.00	12.00	132.00

2.20.12 Grain Silos

DAN COSGROVE LTD

Model	Diam m	Ovrall Hght	Bushel Capcty	Metric Tonnes			Maize	Retail Price incl GST
				Wheat	Barley	Oats		
CB 62	1.8	4.24	152	4.1	3.4	2.7	3.8	\$1,961.00
CB 63	1.8	5.06	211	5.7	4.76	3.8	5.4	\$2,203.00
CB 91	2.74	4.17	256	6.96	5.78	4.6	6.5	\$2,469.00
CB 92	2.74	4.98	392	10.6	8.86	7.05	9.95	\$2,578.00
CB 93	2.74	5.8	528	14.36	11.93	9.5	13.41	\$3,013.00
CB 94	2.74	6.6	664	18.06	15.00	11.93	16.86	\$3,195.00

Note: Price includes FREE DELIVERY 80 kilometres FROM TIMARU ONLY. \$2.20 per kilometre thereafter.

No Ladder included in prices quoted

CB 121	3.66	3.31	452	13	10	8	12	\$3,734.00
CB 122	3.66	4.12	695	20	15	13	18	\$3,925.00
CB 123	3.66	4.93	938	27	21	17	24	\$4,257.00
CB 124	3.66	5.74	1191	33	27	22	30	\$4,740.00
CB 125	3.66	6.55	1424	40	32	26	37	\$4,999.00
CB 126	3.66	7.36	1667	46	38	31	43	\$5,373.00

Note: Price includes FREE DELIVERY 80 km from Timaru to Rakaia. \$2.20 per kilometre thereafter.

When a pilot vehicle is required it is to be supplied by client.

Silos come complete with external wall ladder and bagging-off chute.

2.20.13 Silage Pits

MCKENDRYS

\$150.00 per slab

\$ 95.00 per column

2.20.14 Structural Aids

HAYES

Pulley Blocks -	50 mm single, 70 kg	\$ 8.17
	50 mm double, 136 kg	\$ 12.70
	75 mm single, 114 kg	\$ 34.27
	75 mm double, 275 kg	\$ 47.84
	75 mm triple, 430 kg	\$ 60.37
	100 mm single, 160 kg	\$ 35.31
	100 mm double, 410 kg	\$ 56.33

100 mm triple, 635 kg	\$ 60.37
Self locking Blocks 230 kg (with 18m rope)	\$ 64.73
Light Blocks 50 mm 136 kg (with 12m rope)	\$ 33.36
Self locking-less rope	\$ 44.73
All Metal Gambrel	\$ 6.12
Snig Chains 10 mm with Slip or Grab Hooks	\$ 92.40
Slip Hook - for light chain	\$ 7.93
for 10 mm chain	\$ 19.40
for 13 mm chain	\$ 30.68
for 16 mm chain	\$ 30.10
Grab Hook - for 10 mm chain	\$ 19.40
for 13 mm chain	\$ 22.88
for 16 mm chain	\$ 30.63

2.21 REPAIRS AND MAINTENANCE

The best way to estimate the likely expenditure on repairs and maintenance for all plant, buildings, fences, sheep and cattle yards, tracks and culverts is:

1. The close scrutiny of the farm accounts and
2. Questioning the farmer directly, on likely expenditure programme.

If the information is not available through such sources, the following rates may be used as an approximate guide. It should be borne in mind that expenditure on repairs and maintenance is strongly dependent upon the income for that particular year.

Dwellings	1 - 3%) depending upon the
Farm buildings	1 - 3%) age of the building
Piggeries	2 - 5%
Water supply	Up to 5% depending on water type
Implements and plant	7.5-15% depending upon use
Roads, tracks and culverts	1 - 5% depending on locality
Yards and dip	2.5- 5%

The following are tools/equipment that can be useful for Repairs and Maintenance:

Axes

4 Axe Hatcher	1.25lb	\$22.21
Axe Agder	2.75lb	\$37.22

Grease Gun - Heco Dual Purpose \$45.28

Hammer

Claw	13oz to 20oz	\$29.94 to \$46.67
Sledge	1.80kg	\$44.33

Oil Cans

Oil can sphinx pump	150ml	\$10.80
	550ml	\$13.13

Picks

Mutton - head only	\$42.87
Road - head only	\$43.64

Shovels

Yates Contractors	\$31.53
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Slasher

Lienert Heavy	\$74.66
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2.22 VEHICLE EXPENSES

2.22.1 Vehicle Registration

Every motor vehicle must be registered and licensed before it may be used on the road. A vehicle is registered once in its life, but must be licensed annually.

Registration Fees

		<u>Registration Fee</u>	<u>GST</u>	<u>Total</u>
Farmers Cars	under 1300 cc	\$148.50	\$14.84	\$163.24
	1300 - 2600 cc	\$186.40	\$18.64	\$205.04
	2600 - 4000 cc	\$213.40	\$21.34	\$234.74
	Over 4000 cc	\$306.40	\$30.64	\$337.04
Combine Harvesters		\$ 70.40	\$ 7.44	\$ 81.84
Trucks				
Tare Weight	up to 2000 kg	\$213.40	\$ 21.34	\$237.74
	over 2000 kg	\$306.40	\$ 30.64	\$337.04
Trucks (no C.O.F. Fee)				
Tare Weight	up to 2000 kg	\$ 24.20	\$ 24.13	\$265.43
	over 2000 kg	\$334.30	\$ 33.43	\$367.73
Grass Mowers		\$166.40	\$ 16.64	\$183.04
Farm Motorcycles				
	under 60 cc	\$ 63.40	\$ 6.34	\$ 69.74
	over 61 cc	\$120.00	\$ 12.00	\$132.33
Trailers				
	Light	\$ 77.20	\$ 7.20	\$ 84.92
	Heavy	\$ 96.20	\$ 9.62	\$105.82
<u>Class A</u>				
Tractors	wheeled	\$ 17.40	\$ 1.74	\$ 19.14
	tracked	\$ 17.40	\$ 1.74	\$ 19.14

Separate rates also apply for 6 monthly registration

Cost of registration plates

General purpose plates (pair)	12.00	1.20	13.20
Single plates	2.00	0.20	2.20
Trade plates (pair)	3.00	0.30	3.30
Trade plates (single)	2.00	0.20	2.20

2.22.2 Licencing Fees

		<u>Registration Fee</u>	<u>GST</u>	<u>Total</u>
Combine Harvesters		\$52.40	\$5.24	\$57.64
Farmers Cars	Under 1300 cc	\$62.40	\$6.24	\$68.64
	1300-2600 cc	\$62.40	\$6.24	\$68.64
	2600-4000 cc	\$62.40	\$6.24	\$68.64
	Over 4000 cc	\$62.40	\$6.24	\$68.64
Farmers Motorbikes				
	61 cc and over	\$71.30	\$7.13	\$78.43
Farmers Trucks				
Tare Weight	up to 2000 kg	\$62.40	\$6.24	\$68.44
	over 2000 kg	\$62.40	\$6.24	\$68.44
Tractors exempt Class B		\$52.40	\$5.24	\$57.64
Trailers no C.O.F. Fee	Light	\$28.20	\$4.72	\$31.02
	Heavy	\$47.20	\$4.72	\$51.92

2.22.3 Road User Charges From 1 December 1986

The Road User Charges system is a "user pays" approach to transport which is intended to levy the heavy transport operators with road user licence fees. The vehicles which must pay Road User Charges are described below, and are required to display either time licences (for off road vehicles) or distance licences (for heavy vehicles used on the roads).

Vehicles required to pay road user charges are:

1. All vehicles, including trailers, whose gross laden weight exceeds 3.5 tonnes.
2. All vehicles which are powered other than by petrol, CNG or LPG.

Exemptions include:

Vehicles licensed as E Class A.

- mobile machinery never used on roads except for servicing at a garage or driver testing.

Vehicles licensed as E Class B.

- farm machinery with restricted road usage.

Unregistered motor vehicles.

Vehicles exempt from registration and annual licence fees.

Two-wheeled vehicles whose gross laden weight is less than 1 tonne.

Time Licences - Consult the Post Office for these charges.

Distance Licences

Distance licences are classified according to whether the vehicle is powered or unpowered, the number of tyres per axle and the axle spacing.

As there are so many variables in computation of rates we have given an example of 2 costs in what is believed to be an average farm vehicle and distance.

Vehicle	1	- 5 t, 5000 km	Gross Rate	\$132.00
	2	- 10 t, 5000 km	Gross Rate	\$526.79

When the distance licence is exhausted, a new licence must be obtained. The nominated maximum weight may be increased by either obtaining a new licence or obtaining a supplementary licence.

Refunds may be obtained when:

- An unexpired licence is replaced
- A vehicle is permanently destroyed
- Off-road travel has occurred

All vehicles requiring distance licences must be fitted with an approved distance recorder in working order. Hubodometers are required where the gross laden weight exceeds 3.5 tonnes.

2.22.4 Fuel, Oil and Grease

Petrol - Regular (91 octane) 80.82 cents per litre.
 - Super (96 octane) 83.402 cents per litre.

Diesel - 60.5 cents per litre.

Multi-purpose lubricating oil		- 60 litre drum	\$158.40
		- 209 litre drum	\$533.37
Multi-purpose grease		- 18 kg drum	\$ 64.24
		- 2.5 kg drum	\$ 9.86
Transmission oil	- 80 W 90	60 litre drum	\$137.28
		209 litre drum	\$459.80
	- 85 W 140	60 litre drum	\$139.92
		209 litre drum	\$469.00
	Multipurpose (wetbrake etc)	60 litre drum	\$149.82
		209 litre drum	\$503.48

- Antifreeze - \$2.29 per litre in a 209 litre drum.
 - \$2.74 per litre in a 20 litre container.

2.22.5 Repairs and Maintenance

The best way to estimate likely expenditure on repairs and maintenance for all motorised plant is to obtain a figure direct from the farmer. However, if this is not possible then the following can be used as a rough guide.

Cars and light trucks allow 30-40 cents per km
 Tractors allow \$4 to \$20 per hour depending on size and age (or 80% of purchase price over economic life of tractor - see examples below)

Mobile plant allow 5% of initial value

2.22.6 Tractor Running Costs

Guide for Fuel Consumption on Minimum Cultivation

PLEASE NOTE THIS IS ONLY A GUIDE (based on .26 litres per kW hr)

16 HP	11.5 kW	2.99 litres per hour
30 HP	22.0 kW	5.72 litres per hour
40 HP	30.0 kW	7.80 litres per hour
50 HP	37.0 kW	9.62 litres per hour
64 HP	48.0 kW	12.48 litres per hour
75 HP	55.7 kW	14.48 litres per hour
80 HP	60.0 kW	15.60 litres per hour
103 HP	77.2 kW	20.07 litres per hour
160 HP	119.0 kW	30.94 litres per hour

30 kW (40 HP) Tractor

Economic Life 3500 hours (5yrs) 700 hours per year

Initial Cost \$20,000

Resale Price \$ 7,000

Fixed costs per annum

Opportunity cost \$20,000 at 20%	\$4,000.00
Replacement cost \$20,000 - \$7,000	
\$13,000 at 20% for 5 years	
Sinking fund factor .13438	\$1,746.94
Registration	\$ 19.14
Insurance \$46 plus .55% on balance over \$5,000	\$ 128.50
	\$5,894.58

Total fixed cost per hour (700 hours/year)

\$8.42

Variable costs per hour

Fuel (.26 litres/kW hr) 7.8 litres at 60.5c/litre	\$4.72
Oil and filters 15% of fuel cost	\$0.71
Repairs and maintenance .80% of purchase price over economic life	\$4.57

Total variable costs per hour	\$10.00
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Total cost per hour	\$18.42
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Total per ha (assuming .607 ha per hour)	\$30.34
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Including labour at \$8 per hour	Total per hr	\$26.42
	Total per ha	\$43.52

48 kW (64 HP) Tractor

Economic Life 3500 hrs (5 years) 700 hours per year

Initial Cost \$33,000

Resale Price \$12,250

Fixed costs per annum

Opportunity costs \$33,000 at 20%	\$6,600.00
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Replacement cost (\$33,000 - \$12,250)	
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\$20,750 at 20% for 5 years	
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Sinking fund factor .13438	\$2,788.38
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Registration	\$ 19.14
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Insurance \$46 plus .55% on balance over \$5000	\$ 200.00
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	\$9,607.52
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Total fixed cost/hour assuming 700 hours/yr	\$ 13.75
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Variable costs per hour

Fuel (.26 litres/kW/hr) 12.48 litres at 60.5c/litre	\$ 7.55
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Oil and filters 15% of fuel cost	\$ 1.13
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Repairs and maintenance 80% of purchase price over economic life	\$ 7.54
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Total variable cost per hour	\$ 16.22
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Total cost per hour	\$ 29.82
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Total per ha (assuming .81 ha per hour)	\$ 37.82
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Including labour at \$8 per hour	Total per hour	\$ 36.81
	Total per ha	\$ 45.44

73 kW (105 HP) Tractor

Economic Life 3500 hrs (5 years) 700 hours per year

Initial Cost \$45,000

Resale price \$15,750

Fixed costs per annum

Opportunity cost \$45,000 at 20% \$ 9000.00

Replacement cost (\$45,000 - \$15,750)

\$29,250 at 20% for 5 years

Sinking fund factor .13438 \$3,930.61

Registration \$ 19.14

Insurance \$46 plus .55% on balance
over \$5,000 \$ 266.00**\$13215.75**

Total fixed costs per year assuming 700 hours/year \$ 18.88

Variable costs per hour

Fuel (.26 litres/kWhr) 18.98 litres at 60.5c/litre \$ 11.48

Oil and filters 15% of fuel cost \$ 1.72

Repairs and maintenance 80% of purchase price
over economic life \$ 10.29

Total variable costs per hour (700 hrs/year) \$ 23.28

Total cost per hour \$ 42.37

Total per ha (assuming 1.05 ha per hour) \$ 40.35

Including labour at \$8 per hour Total per hr \$ 50.37
Total per ha \$ 47.97**119 kW (160 HP) Tractor**

Economic Life 3500 hrs (5 years) 700 hour per year

Initial Cost \$90,000

Resale Price \$31,500

Fixed costs per annum

Opportunity cost \$90,000 at 20% \$18,000.00

Replacement cost (\$90,000 - \$31,500)

\$72,000 at 20% for 5 years

Sinking fund factor .13438 \$ 8.21

Registration \$ 19.14

Insurance \$46 plus .55% on balance
over \$5000 \$ 7,861.21
\$ 513.50**\$26,393.85**

Total fixed costs per year assuming 700 hours/yr	\$ 37.71
Variable costs per hour	
Fuel (.26 litres/kW/hr) 30.94 litres at 60.5c/litre	\$ 18.71
Oil and filters 15% of fuel cost	\$ 2.81
Repairs and maintenance 80% of purchase price over economic life	\$ 20.57
Total variable cost per hour	\$ 42.09
Total cost per hour	\$ 79.80
Total per ha (assuming 1.22 ha per hour)	\$ 65.41
Including labour at \$8 per hour	Total per hr \$ 87.80
	Total per ha \$ 71.97

2.22.7 Combine Harvester Running Costs

108 kW (150 HP) Header Harvester

Economic Life 2000 hours (10 years) 200 hours per year

Initial Cost \$140,000

Resale Price \$ 49,000

Fixed costs per annum

Opportunity cost \$140,000 at 20%	\$28,000.00
Replacement cost (\$140,000 - \$49,000) \$91,000 at 20% for 5 years	
Sinking fund factor .13438	\$ 3505.57
Registration (6 months)	\$ 40.82
Insurance \$46 plus .55% on balance over \$5000	\$ 782.50
	\$32,328.89

Total fixed costs per hour assuming 200 hrs/year	\$ 161.64
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Variable costs per hour

Fuel (.26 litres/kW hr) 28.08 litres at 60.5c/litre		\$	16.99
Oil and filters 15% of fuel cost		\$	2.55
Repairs and maintenance 80% of purchase price over economic life		\$	56.00
Total variable costs per hour		\$	75.54
Total cost per hour		\$	237.18
Total per hour (assuming 1.25 ha per hour)		\$	189.74
Including labour at \$12 per hour	Total per hr	\$	249.18
	Total per ha	\$	199.34

2.23 ELECTRICITY

Central Canterbury Electric Power Board Farm Tariffs.
(N.B. These tariffs apply from 1st April 1986).

A discount of 10% applies to all accounts paid within fourteen days after date of rendering.

NON-DOMESTIC TARIFFS:

A consumer intending to change tariff code must give at least one month's notice of intention to change and undertake to remain on the new tariff for at least twelve months.

Non-domestic tariffs N1 to N5 apply to consumers supplies at 400/230 volts.

- (R1) For consumers supplied on tariffs N1 to N5 at 400/230 volts through equipment owned by the Board, but where the metering is on the 11,000 volts side of the transformer within the consumer's premises, a rebate of 1.5% applies to the demand and energy components only.
- (R2) For consumers supplied on tariffs N1 to N5 at 11,000 volts through equipment owned by the consumer and where the metering is on the 11,000 volt side of the transformers within the consumer's premises, a rebate of 3.5% applies to the demand and energy components only.

Accounts for supply on tariffs N1 to N4 will be rendered two-monthly. Accounts for supply on N5 and N6 will be rendered monthly. These intervals may be varied at the discretion of the Board.

Where two rate tariffs apply, day hours are between 7.00 a.m. and 9.30 p.m. and night hours are between 9.30 p.m. and 7.00 a.m.

Night rates may be reduced to between 11.00 p.m. and 7.00 a.m. in the future, to coincide with N.Z.E. night rate hours.

Code

N1 NON-DOMESTIC TARIFF NO. 1 - GENERAL SUPPLY

Applicable to installations used for all non-domestic purposes (except irrigation pump motors) where the maximum demand is 40 kVA or less. Applicable to irrigation pumps up to 5 kW.

(ES) Supply charge \$119.69 per annum. (30.6c/day).

(E1) Plus all units at \$12.70 each.

Consumers whose consumption patterns have a significant seasonal variation resulting in only a small proportion of their daytime maximum demands being above 40 kVA may, at the discretion of the Board, be permitted to take supply under this tariff.

N2 NON-DOMESTIC TARIFF NO. 2 - GENERAL SUPPLY (TWO RATE)

Applicable to installations used for all non-domestic purposes (except irrigation pump motors) where the maximum demand is 40 kVA or less. Applicable to irrigation pumps up to 5 kW.

(GS) Supply charge \$137.97 per annum. (37.8c/day).

(G2) Plus day units at 13.21c each.

(G3) Plus night units at 4.12 each.

Consumers whose consumption patterns have a significant seasonal variation resulting in only a small proportion of their daytime maximum demands being above 40 kVA may, at the discretion of the Board, be permitted to take supply under this tariff.

N3 NON-DOMESTIC TARIFF NO. 3 - CONTROLLED SUPPLY

Applicable to all permanently connected appliances used for non-domestic purposes and approved by the Board, except irrigation pump motors. Consumers on this tariff will be controlled off-peak at the discretion of the Board.

All waterheater installations on this tariff must comply with N.Z. Standard Specifications 4602 and 4603.

(H4) All units at 6.01c each.

(HN) The Board will install and maintain an approved time switch or other means of control at a rental of \$26.28 per annum. (7.2c/day).

(HS) If supply is taken on this tariff only, a supply charge of \$119.69 per annum will also apply. (30.6c/day)

N4 NON-DOMESTIC TARIFF NO. 4 - LARGE USER SUPPLY

Applicable to installations used for all non-domestic purposes (except irrigation pump motors) where the maximum demand is between 40 kVA and 250 kVA.

(JS) Supply charge of \$137.97 per annum. (37.8c/day).

(I3) Plus night units at 4.12c each.

(IR) A rebate of 3.65c per day (\$13.32 per annum) per kVA of power factor correction capacitors fitted and functioning to the satisfaction of the Board.

Consumers must take supply for not less than twelve consecutive months in each year.

(NB: If Sufficient daytime usage is made of pumps between 7 kW and 20 kW, it may be cheaper to run on the I1 tariff. If so, contact your Central Canterbury Power Board for further advice).

Electricity - South Island Concession

This scheme at present provides for a 25% electricity rebate to manufacturing industry, some tourist accommodation facilities, and a few electricity intensive agricultural operations in the South Island. Examples of qualifying farm activities are environmentally controlled horticulture, broiler production and irrigation. In the 1984 Budget it was announced that this concession will be phased out with termination on 31 March 1987.

2.24 ADMINISTRATION EXPENSES

2.24.1 Telephone and Toll Charges

Rental (2 monthly basis)

	Business Rate			Residential Rate
Class	B1	B2	B3	
1	107.50	79.00	37.00	25.00
2	136.50	96.50	44.00	30.50
3	138.50	112.00	50.00	35.50
4	165.50	121.50	51.50	37.00
5	170.00	126.00	52.50	38.50
6	177.50	131.00	54.00	40.00
7	183.50	138.50	55.50	41.50

- Class 1 - Restricted attendance exchanges.
Class 2 - Automatic exchanges (up to 200 subscribers)
and continuous attendance manual exchanges
(201-3000 subscribers)
Class 3 - Automatic exchanges (201-3000 subscribers)
and manual exchanges (3000 plus subscribers)
Class 4 - Automatic exchanges (3001-10000 subscribers).
Class 5 - Automatic exchanges (10001-20000 subscribers).
Class 6 - Automatic exchanges (20001-80000 subscribers).
Class 7 - Automatic exchanges (80000 plus subscribers).

Tolls

Charges for 3 Minute Calls.

The charge for a three minute call to any exchange may be obtained from the local Toll Operator on request.

Distance	Charge	Peak	Standard	Night	Off-Peak
Up to 40 km	A	\$0.17	\$0.17	\$0.17	\$0.08
Over 40 up to 50	B	\$0.34	\$0.34	\$0.34	\$0.17
Over 50 up to 65	C	\$0.60	\$0.54	\$0.51	\$0.27
Over 65 up to 100	D	\$0.93	\$0.84	\$0.69	\$0.33
Over 100 up to 165	E	\$1.44	\$1.26	\$0.90	\$0.45
Over 165 up to 245	F	\$1.89	\$1.65	\$1.23	\$0.60
Over 245 up to 325	G	\$2.40	\$2.10	\$1.47	\$0.72
Over 325 up to 485	H	\$2.88	\$2.52	\$1.83	\$0.90
Over 485 up to 650	I	\$3.57	\$3.09	\$2.34	\$1.14
Over 650	J	\$3.93	\$3.42	\$2.58	\$1.29

Rating Periods. On Week days:

Peak: 8am - noon

Standard: noon - 6pm

Night: 6am - 8am and 6pm - 10.30pm

2.25 STANDING CHARGES

2.25.1 Insurances

In the case of fire insurance, premiums vary according to the nature of the risk and the value of the buildings or assets insured etc. Accident premiums vary with the nature of the work, etc.

Buildings: per \$100 value.

House Owners Cover Dwellings	-	Brick	\$0.200
	-	Wood	\$0.280
Outbuildings - any construction			\$0.270
All Risks Dwelling contents (regardless of construction.)			\$0.600

Plant: per \$100 value (same as buildings).

Full Perils (All Risks) Cover: \$.270

All engine functioned farm machinery - \$5.00/unit for breakdown

Any other farm machinery and equipment including plant, P.T.O. balers and non engine functioned implements anywhere in the district - \$0.270/\$100

Manures and general farm produce whilst on the farm - \$0.270/\$100

Livestock on farm (fire only) \$0.090/\$100

Comprehensive:

Harvesting: \$40.00 plus \$0.55 per \$100 over \$5000 cover.

When mechanical damage occurs, the first \$150 is now payable by the owner. Where internal damage to harvesting equipment occurs, an additional premium of 25% of the basic premium is payable.

Tractor: \$46.00 plus \$0.55 per \$100 over \$5000.

N.B. Tractor-drawn and self propelled harvesters at the same rate.

Contractors pay these rates plus an additional premium on their vehicles.

All these premiums plus \$0.110 per \$100 Earthquake and War Risk, plus GST.

Tractor Tyre Insurance

100% of Premium of S.I. up to \$3000

75% of Premium of S.I. between \$3000 and \$5000

50% of Premium of S.I. between \$5000 and \$10,000

40% of Premium of S.I. over \$10,000

Minimum Premium \$20.00.

Specialised Farm Equipment - Chainsaws, tools, scanaprobe, nitrogen contrainers, radio telephones etc.

All Risks: per \$100 value - .270%

All Risks: per \$100 value - .270%

Crops: per \$100 value:

Fire Only - Growing or cut in the field (including threshing) in any building or silo and transit risk, 0.45% (time limit up to 12 months).

As per above but excluding whilst in any building or silo, 0.65% (3 month limit of cover).

Fire plus Hail, Flood, Stock, Snow and Frost Risk - 2.25%.

Hay - 0.270%

Wool:

0.85% (When in farm building the rate is that for contents of the building. Rate - .270%)

Shelter belts (excludes live hedge fencing):

Rate .270% of assessed value.

Employers' Liability:

Accident Compensation Commission - All employees will be covered by a levy paid to the Inland Revenue Department.

Personal Accident (owners' personal cover):

Details vary, but a typical cover would be as follows:

Death \$12,500. Total disablement from accident \$100 per week. Total disablement from disease \$100 per week. Premium \$167.50 plus GST per annum.

Public Liability - to cover legal liability arising from negligence caused by employees, stock, farm vehicles or fire and explosion but excludes motor vehicles which should be registered under the Transport Act.

Cover	Premiums
\$100,000	\$30.00 plus GST
\$250,000	\$40.00 plus GST

Forest and Rural Fires Act included.

The premiums are based on the ownership of one property.

Stock Insurance

These charges are from Pyne Gould Guinness for "loss of use by accident".

Pedigree bulls:	\$4.70 for 12 months/\$100
Run bulls:	8.00% for up to 8 months. Limit of \$25,000 per animal.
Stud rams:	14% for 12 months.

Stud rams death only:	12% for 12 months. Limit \$5,000 per animal.
Stud Boar:	12% for 12 months. Limit \$5,000 per animal.
Deer	7.50% for 12 months (excess of 3% of total sum insured)
Goats	7.00% for 12 months (excess of 3% of total sum insured)

2.25.2 Rates

The main classes of rates are as follows:

- General County rates for the costs involved in administering the County.
- Special rates for ad hoc bodies, e.g. Catchment, Drainage Boards.
- Special rates for repayment of loans, raised by any local body.
- Water supply charges where stock water is supplied by and local body, e.g. water races, County water schemes.
- Pest Destruction Board rates where the farm is in a Board district.

All counties rate on either the Capital or Land values. Water and pest destruction rates may be assessed on either per hectare, Capital value or Land value basis.

For budgeting purposes ask the farmer or the local body concerned.

2.25.3 Interest

Building Societies

May lend to build a dwelling on a farm - policies and interest rates vary with the institution. In general the interest rate ranges between 22 and 24% for a maximum term of 25 years (first mortgage) and 26% second mortgage. There is a 75% lending margin and shares in the company must have been held for some time (usually 3 years).

Dairy Companies

Some Dairy companies lend to shareholding suppliers.

Security: unsecured, lein on milk fat, or I.W.S. (Instrument by Way of Security).

Loans for seasonal finance or medium term (development stock).

Lands and Survey Department

Land and Settlement Board Finance.

Money is available for the development and settlement of Crown Land over and above stipulated deposit or cash contribution required to take over the farm, stock and plant.

Interest rates are the same as for the Rural Banking and Finance Corporation - see below.

Life Insurance Companies

Policies vary from company to company.

One example is as follows:

Long term mortgage finance - generally up to 50% of valuation, 15-25 year table mortgage at 20-24%. The mortgagor is expected to have adequate life cover for the principal.

Interest rates will vary between companies and are likely to be negotiated on a personal basis in many cases.

Rural Banking and Finance Corporation

General Policy: To consider any viable agricultural, horticultural or fishing requirement subject to meeting security liabilities and commercial lending criteria.

Standard Policies:

Farm Settlement

Policy

Preference is given to applicants purchasing their first farm with major consideration being given to the applicants experience, cash contribution and the units long term viability.

The emphasis is on quality settlements and the viability of the proposition must be undoubted.

Terms

Up to 25 year table first mortgage (and first I.W.S. over stock where necessary). Interest 17.5%. Up to 66% land and stock value.

Amounts

The bank does not specify any loan limits.

Stock Loans

Policy

Lessees, sharemilkers and other farmers who do not own the land they farm may obtain loans to purchase stock and plant.

Terms

5-7 year table loan secured by I.W.S. over stock (and plant where necessary) up to 60% security margin.

Interest rates as above.

Amount

Loan limits are flexible except for first time sharemilkers the limit is \$55,000.

Additional Land

Only where required to make economic. Commercial rates apply.

Climatic Relief

Confined to exceptional climatic events only.

Buildings

Commercial rates depending on necessity.

Resettlement

Commercial terms apply except in special cases.

Development

Policy

If already on property and dependent on development for viability. May be concessional.

Terms

Interest 17%.

Restructuring

Policy

Debt discounts available to 30/6/87.

or Refinance with commercial money.

Fishing Loans

Policy

Parallels to farming policy i.e. purchase, special fishing boat loans, refinance, re-conditioning, change of fishing method, with table mortgage loans up to 2/3 security value and the current interest rate charged is

17.5% with market indicator rate adjustment (reviewable annually). Applicant must hold a current controlled fishing licence or permit.

Some landbase security is preferred as well as the vessel.

Commercial Policies:

Term loans are available for a wide range of propositions relating to the primary sector including assistance to servicing and processing industries. These cover the stronger and more commercially orientated projects which normally cannot be assisted under the banks traditional lending activities. Enterprises will need to be financially viable, propositions soundly based and capable of meeting obligations on commercial lending terms.

Terms

Maximum 25 years. First year may be interest payment only, but maximum term of loan is still (prefer shorter term) 25 years. Interest rates 19% for security over low if land and plant purchase and 23% for plant if no land security.

Other

A wide range of other areas are covered. Information on these should be sought from the Rural Bank.

Solicitors and Trust Companies

The Trustees Act defines where and to what extent these funds can be invested (e.g. first mortgage on land up to 2/3 of a registered valuers value) unless there are special provisions in the will of Trust investment which govern investment.

Provide medium term debt finance (3 to 5 years) often renewable or at least able to be refinanced.

Solicitors generally lend a flat mortgage, some trust companies may include repayment provisions.

Generally lend up to 50% of valuation on first mortgage or on second mortgage with Rural Bank guarantee.

Interest rate varies and is currently between 22% and 28%.

Stock and Station Agencies

These institutions have agreed to limit their lending to seasonal only. Loan facilities are very much on a personal basis, and are often unsecured although there is an increasing trend to take an I.W.S. or mortgage. As a general guide interest rates are 19.5% for arranged finance and between 20% and 27% for unarranged finance.

Trading Banks

Policy varies from Bank to Bank and while Trading Banks supply limited mortgage finance to assist with land purchase they prefer to concentrate in the field of short term seasonal and fully fluctuating working capital finance. There are, of course, exceptions, and when funds permit, the savings subsidiaries are able to offer longer term funds for land purchase.

The following avenues are generally available:

Term Loans:

- Maximum Term 5 years minimum 6 months.
- Current minimum rural rates 24.5%
- Livestock, plant, land purchase.

Overdraft:

- Seasonal farm working expenditure.
- Fully fluctuating working capital expenditure.
- Renewed annually or as required.
- Current minimum rates 22.75%

Off Shore Loans:

- No specific ceiling. All negotiable as to term and rate.
Only suitable for very large deals.

Personal Loans:

- Maximum Term 5 years, minimum 6 months.
- Amounts: Minimum \$500
Maximum \$20,000
- Rates 21.5% secured 23.0% unsecured per annum
- Home improvement, personal expenditure, garages, pools, drive-ways etc.

Lease Finance:

- Term - Usually 3.5 years but longer terms can be considered.
- Rates 22.5%
- Minimum amount \$10,000

No capital outlay, ideal for heavy plant purchase opportunity to purchase at end of term, planning and budgeting easier.

Commercial Bills:

- Minimum amount \$20,000
- Rates 19% subject to market fluctuations
- Bridging situations where fixed term is envisaged.
Isolated rural application.

Bridging Finance:

- 22.75% on first mortgage.

Generally used for in-between farm sale-purchase deals.

Security:

Generally in all avenues of finance security will be sought by bank.

Examples are: Landed mortgage (1st, 2nd, 3rd freehold or leasehold), livestock/chattels mortgage, mortgage debenture (in case of company) assignments over life policies, scrip, shares, personal guarantees.

Financial Data:

Minimum requirements generally are -

Up-to-date balance sheet and accounts (to include farm working account and details of livestock holdings), cash flow forecast and budget, personal statement of assets and liabilities. All either self or professionally prepared.

Some Other Considerations taken into account on all applications for finance:

- Knowledge/experience in farming.
- Character and capacity.
- Age.
- Past borrowing record.
- Repayment capacity.

Trustee Savings Banks

Policy is not to earn profits for shareholders, but to provide community service under the control of local trustees. Farm lending policy varies with the institution, but the following summarises the Trustees Banks' policies:

- Loans between 50 and 75% of valuation on first mortgage (limit usually negotiable and dependant on servicing ability)
- Terms: 20-25 years occasionally up to 40 (table)
- Interest: Within range 21 - 27% (1st mortgage)

2.25.4 Rent - charge actual rental paid by the farmer

Renewed Rents on Crown Renewable Leases are 4.5% of Crown Rental Value, as from 1971. Rentals carry a .5% rebate for prompt payment which are reviewed every 11 years. Thus to calculate C.R.V., gross rentals must be ascertained. Short term lease rents usually assessed within the range of 4.5%-5% of Capital Value.

Pastoral Leases - 2.25% of Land Exclusive by Improvements (L.E.I.) except for renewals which are 1.5% for the first 11 years.

2.26 PROFESSIONAL FEES

This section is designed to assist in the assessment of various fees and charges associated with the purchase and sale of land such as valuation, surveying, real estate and legal costs.

It also covers the costs or charges of various Institutes and Societies that offer services to the rural community, such as farm consultancies, rural valuers and farm accountants.

2.26.1 Accountancy Fees

Accountants base their fees on input of time taken in compiling returns and services required by their clients.

Some of the reasons why fees vary considerably are:

- The adequacy of the presentation of farm records to the accountant by the farmer.

- The form of ownership - individual, company or partnership, and if there is a trust account involved also.

- The amount of information the farmer wants: advice on management, financial advice, trial balances, etc.

- The degree of intensification of the farming operations.

- The amount of administration undertaken by the accountant. Budgeting control, receiver of all income, and payee of all expenditure for the farmer.

The fees definitely bear no relationship to the farmer's capital or net taxable balance, or turnover.

For Lincoln College budgeting purposes, assess fees based on the total capital involved, the degree of intensification of the management, and the form of ownership.

The current range of accounting costs are approximately as follows:

Dairy Farms	up to 100 cows	\$800
	100 to 200 cows	\$900
	200 and over	\$1200
Sheep and Cattle Farms	1000 s.u.	\$900
	2000 s.u.	\$1200
	5000 s.u.	\$1400

Mixed Farms

1500 - 2000 s.u.
and cropping

\$1000

N.B. With the introduction of the new taxation provisions (particularly regarding livestock) fees for the 1987 income year will be higher by approximately 15 to 20%.

2.26.2 Consultancy Charges

These are based on an hourly rate and only Registered Farm Management Consultants can charge fees.

Travelling and administration expenses and computer time charges are all extra.

Lincoln College Farm Advisory Service

Lincoln College operates a commercial Farm Advisory Service which provides a full consultancy, advisory, and rural valuation service to the public.

A group of full-time farm management consultants, a horticultural management consultant and a registered valuer are available for consultancy work, property supervision, feasibility studies and valuations. Agricultural study tours are designed and conducted both in New Zealand and overseas.

The Service includes:

1. Regular advisory services to farmers.
2. Executive control and administration of properties.
3. Advice and preparation of reports on specific matters.
4. Valuations, reports and loans recommended on rural properties.

The consultancy fees are based on an average of \$250 per day, and valuation charges are according to the N.Z.I.V.

Enquiries should be addressed to:

The Officer in Charge,
Farm Advisory Service,
Lincoln College,
Canterbury.

Lincoln College Property Management Service

Lincoln College has established the Property Management Service as an independent body to promote farming agreements. It performs two main functions related to both sharefarming and partnership agreements:

- Maintains a register of both Land Owners and investors and potential Sharefarmers and Management Partners and assists with the selection of compatible parties.
- Draws up a draft agreement to meet the particular requirements of the parties and the property concerned. This agreement is then referred to the parties' solicitors for final approval.

Further information and registration forms may be obtained from:

The Deputy Director,
Property Management Service,
Lincoln College,
Canterbury.

Fees:	Registration Fee	\$ 35.00
	Agreement Fee	\$800.00

The Agreement Fee is subject to variation according to the complexity of the agreement and additional work involved over the standard contract.

All travelling and incidental costs incurred will be charged in addition to the above fees.

All fees are subject to review at the discretion of the Management Committee.

2.26.3 Legal Fees

The former system of a New Zealand wide scale of minimum and maximum charges has been abolished. Fees are now worked out on a more appropriate basis (in general based on an hourly rate) taking into account the nature of the job and expenses incurred by the solicitor or law firm. Lawyers are now encouraged to give written estimates for the cost of a job. Anyone seeking a solicitor's help or advice should ask for an estimate (in writing) and both parties should have a clear understanding of what work that estimate is to cover.

Stamp Duty

50,000 - 100,000	1.5%
500 + 1.5% of excess over 50,000.	
Over 100,000	2.0%
1,250 + 2% of excess over 100,000.	

No duty is payable on the first \$50,000 in the value of land or buildings to be used primarily and as a residence. Stamp duty payable on farm properties is reduced where one or more of the purchasers does not hold or has not held interest in farm land exceeding \$150,000.

If all purchasers are exempt no duty is payable.

2.26.4 Real Estate Charges

As from 1st December 1985 the Real Estate Institute of New Zealand Incorporated abolished its professional scale of charges. It then adopted a recommended fee until 1st April 1986 when that recommended fee was revoked.

As at 1st January 1987 there is no scale nor recommended fee relating to any real estate transaction. However most agents still work on a commission basis. The most common fee structures are in the following ranges:

(a) Residential sales;

\$300 basic fee

Plus 3% commission on the first \$200,000 of consideration

Plus 1.5% commission on balance of consideration.

Alternatively:

4% commission on the first \$200,000 of consideration

2% commission on balance of the consideration.

There are a range of varying charges between the 2 levels noted and in less frequent circumstances lower or higher charges may be levied.

The general criteria by which agents fix fees now relate to the level of professional services which the individual company offers. When vendors select intensive marketing programmes, higher fees may be levied. If vendors participate in advertising costs then lower basic fees may be rendered. Sole agencies may attract lesser fees than general agencies.

Auction Sales (Sales other than mortgage sales):

In general these are levied at the same rate as residential sales.

The auctioneer may, in addition, with the vendor's authority, charge to the vendor all auction advertising, flagging, other promotional costs and disbursements.

In addition, an auctioneer may levy an offering fee if the property is not sold at auction or, alternatively, seek a term of sole agency after the auction sale to enable a sale to be concluded.

Mortgagee Sales etc:

Again the fees are negotiable. However the following general criteria usually applies;

1. Where a property is offered under instructions from the mortgagee and has bought in by the mortgagee at the redemption value of where a mortgagee holds a sale and fails to reach the redemption value, or where a mortgagee withdraws the property before the auction, an offering fee being half the basic fee is charged on the redemption value.
2. Where the property is sold above the redemption value whether to the mortgagee or to other than the mortgagee, as the case may be, the fee is usually the basic fee as agreed.
3. Where any land or interest in land is sold or withdrawn on the basis that the purchaser or mortgagor assumes for the amount owing in respect thereof by the vendor, whether secured on mortgage or charged upon the land, or payable under the agreement for sale and purchase, or deferred payment license, the amount for which liability is so assumed may be deemed as the consideration for the purpose of assessing a fee as detailed in the basic fee or withdraw fee.
4. Where the auctioneer is instructed to provide a popular description for advertising purposes and additional fee may be charged.

Multiple Sales and Exchanges:

Where there are multiple sales, exchanges or similar arrangements negotiated together, the fee may be charged as agreed on each sale, exchange or arrangement as a separate transaction.

Purchasing Clauses in Leases:

A compulsory purchase clause in a lease is treated as the sale of freehold as the case may be and fees levied in accordance with an agreed basic fee may be charged. One half of the fee on a conditional contract is levied and the balance on completion of the sale.

Explanations

Business: The value of all goodwill, plant, fittings, fixtures, chattels and stock in trade included in a sale may be collectively be treated as the purchase price.

Chattels - the value of chattels in the sale with the property may be treated as part of the purchase price.

Company shares - where a sale of shares in a company effectively does what a sale, lease or assignment would otherwise have done, then fees may be negotiated in accordance with the basic fee as agreed as if such sale, lease or assignment had actually taken place.

Fees may be negotiated on the cash value of the consideration, passing to the vendor plus the value of any liability transferred from the vendor to the purchaser or benefit transferred from the purchaser to the vendor at the price shown on the contract.

Leasing, Letting, Assignments:

Again fees are totally negotiable.

Residential letting usually attract fees of between 1 and 2 weeks' rental.

It is common for commercial leasing in the Canterbury area to attract fees of 8.5% of the average annual rental for a term of from 1 to 5 years inclusive and an additional 1% for each additional year in excess of 5 years. Total fees usually do not exceed 16% of the average annual rental.

Property Management:

The fee for commercial property management is totally negotiable and usually fixed having consideration to the amount of work and supervision required in property management and the extent of range of services which the client seeks. For larger multi-storied commercial office buildings it is common for management fees to range between 3.5% and 6% of gross rentals inclusive of lessee outgoings collected during management. Lower fees than 3.5% are uncommon. Fees up to 7.5% may be rendered in particular circumstances.

Residential property management commonly attracts a fee in the region of 6 to 7.5% of rentals.

Consultations and Appraisals:

Fees are usually rendered on an hourly basis by arrangement between the principal and the agent. Under the Code of Ethics of the R.E.I.N.Z. agents and members of the institute can levy a fair fee for consultation services.

Conjunctional Sales between members - by arrangement and agreement:

Subdivision: Where the agent advises the vendor on planning for a subdivision and is involved in the marketing it is common for higher fees than the fees noted above to be levied. In some circumstances basic marketing fees of 5 to 6% of contract prices are agreed. In addition it is usual for the vendor to bear advertising and promotional costs or a fair proportion of them.

It should be emphasised that the above notes are for the guidance of students only. There is now no fixed scale of charges.

Where a subdivision or other survey work is contemplated it is suggested that a Registered Surveyor or firm of Surveyors be approached and asked to

give an estimate of the costs involved. They will be quite prepared to do this and can also advise on all aspects of the subdivision.

2.26.5 Valuation Charges

Valuation charges are no longer subject to the minimum scale of charges as set by the New Zealand Institute of Valuers. Valuers may now set their own charges which may be based on an hourly rate and vary depending on the degree of skill or responsibility required, expenses incurred and other factors. Travelling allowance (mileage) is normally charged at the maximum State Service rate.

2.26.6 Land Transfer Fees

This fee is charged by the Lands and Deeds Office of the Justice Department on all land transactions, such as transfers, mortgages and related documents.

The land transaction registration fee is \$30 (plus GST) per document unless unusual or complex in which case this fee may be increased.

2.27 WAGES

2.27.1 Farms and Stations (Dairy Farms) (As from 8/7/86)

Permanent	Less than 12 months experience on dairy farms (per week)	Greater than 12 months exper. on dairy farms (per week)
Under 17 years of age	\$111.06	\$118.06
17 years and under 18	\$131.04	\$138.50
18 years and under 19	\$150.23	\$158.76
19 years and under 20	\$169.49	\$179.13
20 years and over	\$182.97	\$193.38

[The above figures are minimum rates of wages.]

The ordinary hours of work shall be arranged between the employer and the employee, but shall not exceed 108 hours per fortnight. Within every 14 days, one day shall be free of work and 3 days shall be worked as part days, and where possible, the employer shall program free time to coincide with weekends. A full day shall not exceed 9 hours and a part day shall not exceed 6 hours.

No employer shall charge any employee for board and lodging. Where the employer does not provide board or lodging, the employee shall be paid an extra \$33.00 per week.

The minimum hourly rate to be paid to permanent workers shall be 1/50th of the weekly rate.

Casual: The casual rate for a person not guaranteed a 40 hour week shall be 1/40th of the permanent weekly rate for a permanent worker of the same age.

Every worker shall, after each year's continuous employment by one employer, be entitled to 3 weeks paid holiday consisting of 14 days taken consecutively and 7 days which may be taken for one or more days or part of a day.

After 7 years continuous service, a fourth week's holiday may be taken.

After 15 years continuous service, a special holiday of 2 weeks may be taken.

After 25 years continuous service, a special holiday of 3 weeks may be taken.

After 35 years continuous service, a special holiday of 4 weeks may be taken.

After 40 years continuous service, a special holiday of 5 weeks may be taken.

Workers requesting to attend Lands Settlement courses are allowed from 3 weeks leave without pay per annum and up to a maximum of 6 weeks, provided normal farming operations are not affected.

Training Incentives

Workers are entitled to additional payments if they produce suitable evidence of qualifications.

1st qualifying T.C.B. in farming OR qualifying assessment tasks	45 tasks	\$3.75/week
2nd qualifying T.C.B. in farming OR qualifying assessment tasks	90 tasks	\$6.25/week
Trade Certificate in farming OR Trade Certificate assessment tasks	20 tasks	\$10.00/week
Trade Certificate in Farm Management		\$15.00/week

N.B. These allowances do not accumulate.

Wet Weather Gear Allowances

For the purpose of purchasing and maintenance of adequate wet weather gear, an employee shall be paid an additional allowance of \$4.00 per week.

Vehicle Use

Where a worker uses his/her own motor vehicle on the employer's business, he/she shall be reimbursed an allowance at the rate of not less than 38.00 cents per kilometre. In the case of a motor cycle being used, the reimbursement shall be not less than 19.00 cents per kilometre.

2.27.2 Farms and Stations (Sheep Meat and Wool) As at 27/8/86

Permanent	Less than 12 mths exper. on farms (per week)	Greater than 12 mths exper. on farms (per week)
Under 17 years of age	\$104.37	\$110.28
17 years and under 18	\$121.77	\$128.68
18 years and under 19	\$143.04	\$151.14
19 years and under 20	\$158.49	\$167.46
20 years and over	\$172.02	\$181.76

The above figures are minimum rates of wages.

Service - After 5 years' current continuous service with the same employer a worker shall be paid, in addition to the rates of pay prescribed, an allowance of \$10 per week.

Where a farm worker has completed 5 years in the industry, he shall, in addition to the rates of pay prescribed, be paid an allowance of \$5 per week.

Where a farm worker has completed 10 years in the industry, he shall, in addition to the rates of pay prescribed, be paid an allowance of \$15 per week.

These allowances are not cumulative.

Ordinary hours of shall not exceed 90 per fortnight where a worker exceeds the stated hours above he/she shall be paid at the rate of time and one half of the hourly rate. This does not apply to station cooks who shall work a six-day week and be entitled to four consecutive days off.

Where the employer does not provide board and lodging the employee shall be paid an extra \$34.50 per week.

In the case where the employee is provided with a house only, the employee shall be paid an extra \$19.43 per week.

The minimum hourly rate to be paid to permanent workers shall be 1/45th of the weekly rate.

Casual: The rates of pay for casual workers are as follows:

	Per hour without Rations	Per hours without Rations
Under 18 years of age	\$4.31	\$3.75
18 years and over	\$5.28	\$4.71

Training Incentives

Workers are entitled to additional payments if they produce suitable evidence of qualifications.

1st qualifying T.C.B. in farming OR qualifying assessment tasks	45 units	\$3.75/week
2nd qualifying T.C.B. in farming OR qualifying assessment tasks	90 units	\$6.25/week
Trade Certificate in farming OR Trade Certificate assessment task	20 units	\$10.00/week
Trade Certificate in Farm Management		\$12.00/week

N.B. The above amounts do not accumulate.

Wet Weather Gear Allowances.

For the purchases and maintenance of adequate wet weather gear, an employee shall be paid an additional allowance of \$4.00 per week.

Vehicle Use

Where a worker is requested to use his own motor vehicle on the business of the employer, he shall be reimbursed an allowance of 38 cents per kilometre (motor cycle allowance 19 cents per kilometre).

Dog Expenses

Employer shall pay normal registration and hydatids control fee, veterinary expenses which are work related and reasonable for the employees dog.

The number of working dogs shall be determined by the employer.

2.27.3 Farms and Stations (Meat (other than sheep meat) Grain, Seed and Herbage) As from 26/8/86

Permanent	Less than 12 months experience on farms (per week)	Greater than 12 months experience on farms (per week)
Under 17 years of age	\$104.37	\$110.28
17 years and under 18	\$121.77	\$128.68
18 years and under 19	\$143.04	\$151.14
19 years and under 20	\$158.49	\$167.46
20 years and over	\$172.02	\$181.76

The above figures are per week and minimum rates of pay.

Service - After 5 years' current continuous service with the same employer a worker shall be paid, in addition to the rates of pay prescribed, an allowance of \$10 per week.

Where a farm worker has completed 5 years in the industry, he shall, in addition to the rates of pay prescribed, be paid an allowance of \$5 per week.

Where a farm worker has completed 10 years in the industry, he shall, in addition to the rates of pay prescribed, be paid an allowance of \$15 per week.

These allowances are not cumulative.

Where the employer does not provide board and lodging the employee shall be paid an extra \$34.50 per week.

In the case where the employee is provided with a house only the employee shall be paid an extra \$19.43 per week.

Casual: The rates of pay for casual workers are as follows:

	<u>Per Hour Without Rations</u>	<u>Per Hour With Rations</u>
Under 18 years of age	\$4.71	\$3.76
18 years and over	\$5.28	\$4.31

Training Incentives

On the production of suitable evidence the worker shall be entitled to the following additional payments to the minimum rate:

1st qualifying T.C.B. in farming OR qualifying assessment tasks	45 units	\$3.75/week
2nd qualifying T.C.B. in farming OR qualifying assessment tasks	90 units	\$6.25/week
Trade Certificate in farming OR Trade Certificate assessment tasks	20 units	\$10.00/week
Trade Certificate in Farm Management		\$15.00/week

N.B. The above amounts do not accumulate.

Wet Weather Gear Allowances

For the purchase and maintenance of adequate wet weather gear, an employee shall be paid an additional allowance of \$4.00 per week.

Vehicle Use

Where a worker is requested to use his own motor vehicle on the business of his employer he shall be reimbursed an allowance of 38 cents per kilometre (motor cycle allowance should be 19 cents per kilometre).

2.27.4 Shearers' and Shedhands' Wages (21/7/86)

Shearers Rates (minimum with rations)

Machine shearing base rate (sheep)	\$60.89/100
Machine shearing base rate (lambs)	\$55.07/100
Machine shearing with cover comb	\$67.55/100
Machine shearing with snow comb	\$68.82/100
Blade shearers	\$91.87/100
Machine shearing with bellies left on.	\$58.91/100

All sheep with metal ear tags, other than stud sheep, are to be shorn at a premium of \$2.60 per 100.

The shearing rate for double fleeced sheep, stud sheep, stud lambs, hogget rams and rams castrated after maturity is 1.5 times the base rate, i.e. \$91.34 per 100.

The shearing rate for other rams is double base rate, i.e. \$121.78 per 100.

An allowance of \$7.00 per day in lieu of rations and accommodation is to be paid to a shearer living away from the farm or contractor's quarters.

A shearer shall be reimbursed 38.08 cents/kilometre travelled if he provides his own transport on his employer's request.

<u>Crutching Rates</u> (minimum) per 100	\$/100
Full belly, full crutch, flank and eye wig	\$30.45
Full belly, full crutch, and flank	\$28.93
Full belly, full crutch, eye wig	\$27.40
Full belly, tail crutch, eye wig	\$22.33
Full belly, full crutch	\$25.78
Full belly, tail crutch	\$20.70
Full belly, full crutch and eye wig - Lamb	\$24.66
Full belly, full crutch, lamb	\$23.20
Half belly, full crutch, flank and eye wig	\$27.40
Half belly, full crutch, eye wig	\$24.36
Half belly, full crutch only	\$22.73
Full crutch and eye wig sheep	\$20.30
Full crutch and eye wig lamb	\$18.27
Full crutch only.	\$18.67
Full crutch lamb	\$16.81
Tail crutch, eye wig	\$16.85
Tail crutch, eye wig, lamb	\$15.16
Tail crutch	\$15.22
Tail crutch, lamb	\$13.70
Eye wig only	\$15.22

The same allowances in lieu of rations and accommodation, and for travel as for shearers apply for crutchers.

Shedhands, Pressers, Daggers and Cooks' Rates (minimum)

Shedhands with no previous experience in the shearing industry shall be paid not less than \$6.12 per hour. Shedhands with three weeks or more experience, shall be paid not less than \$6.99 per hour. Shedhands holding a wool handling certificate shall have their hourly rate increased by 30 cents. Daggers shall be paid not less than \$7.37 per hour, or \$17.40 per 100.

Pressers shall be paid not less than \$7.37 per hour.

For cooking for 18 persons and under, cooks shall be paid not less than \$63.10 per day. For over 18 persons a cook's assistant shall be engaged and shall be paid not less than \$6.26 per hour.

The same allowances in lieu of rations and accommodation and for travel as for shearers apply to these workers.

All workers reporting to the shed shall be paid a minimum of 4 hours pay, except where more than 4 hours are worked. This is applicable only if normal shearing commences and the sheep are not deemed too wet to shear or crutch. If the sheep are deemed to be too wet by secret ballot, a minimum payment of 2 hours will be paid except where the gang is living on the farm, and, having elected to begin work late in the day, less than 4 working hours remain.

2.27.5 Market Garden Workers (As from 13 March 1986)

Permanent Workers	<u>Per Week</u>	<u>Per Hour</u>
Foremen/Forewomen	\$255.95	\$6.40
Leading Hands	\$237.91	\$5.85
Adults 20 years and over 19	\$224.86	\$5.62
Minors 19 years and under 20	\$190.99	\$4.77
18 years and under 19	\$161.60	\$4.04
17 years and under 18	\$137.86	\$3.45
16 years and under 17	\$117.53	\$2.94
Under 16 years	\$ 99.42	\$2.48

Piecework - where workers are engaged on piecework they shall be notified. Piecework shall be paid at such rates as will enable an ordinary capable worker to earn the above rates provided for plus 10%.

A worker who produces to his employer evidence that he has obtained a certificate in Horticultural Practice in either outdoor vegetable production or glasshouse vegetable production shall receive an additional \$10.40 per week.

An allowance of 35 cents per hour shall be paid to a worker while engaged in mixing and applying chemical sprays and fumigants.

Ordinary hours of work shall not exceed 40 per week, or 8 per day to be worked within 5.5 days Monday to Saturday noon, inclusive. Time worked outside or in excess of the hours specified is overtime and is to be paid at time and a half rates for the first 3 hours and at double time thereafter.

Work on Saturdays after noon or on Sundays shall be paid at double rates.

Casual Workers**Per Hour**

Adults		\$5.22
Minors	19 years and under 20	\$4.45
	18 years and under 19	\$3.79
	17 years and under 18	\$3.22
	16 years and under 17	\$2.74
	Under 16 years	\$2.34

Piecework rates as above.

Workers who work only on Saturdays shall be paid at ordinary rates for first 8 hours, 1.5 times ordinary rate for next 3 hours and at double rates thereafter. Workers engaged on a Saturday who have not worked 36 hours in the preceding five days, shall be paid at ordinary rates for the first 4 hours, 1.25 times ordinary rates for the next four hours, at 1.5 times for the next 3 hours and at double rates thereafter.

Work done on Sunday or on statutory holidays shall be paid for at double rates.

Harvesters**Per Hour**

Adults		\$5.45
Minors	19 years and under 20	\$4.64
	18 years and under 19	\$3.94
	17 years and under 18	\$3.36
	16 years and under 17	\$2.89
	15 years and under 16	\$2.41
	14 years and under 15	\$2.07
	13 years and under 14	\$1.77
	Under 13 years	\$1.50

Piecework rates as above.

Overtime shall be paid at 1.5 times ordinary rates for the first 4 hours and double rates thereafter for time worked in excess of:

- 8 hours in any day
- 40 hours in any week
- 5 days in any week

Time worked on Sundays is to be paid at ordinary rates unless the worker has completed 32 hours during the preceding six days in which case time worked shall be paid for at 1.5 time rates.

2.27.6 Orchard and Vineyard Workers (As at 18 March 1986)

Permanent Workers

Minimum rates of wages:	<u>Per week</u>
Managers	\$259.16
Foremen (persons responsible to the workers for the day to day running of establishment)	\$243.92
Adult workers 19 years and over	\$233.90
Junior workers 18 years and under 19	\$201.50
17 years and under 18	\$179.11
16 years and under 17	\$156.72
Under 16 years	\$134.33

Service Payment - After one year's continuous service as an adult worker with the same employer, a worker shall be paid a service allowance of 9.0 cents per hour. After 2 years this is increased to 17.0 cents per hour. After three years this is increased to 26.0 cents per hour.

Casual Workers

The minimum rates of wages for casual workers shall be as follows:

	<u>Per Hour</u>
Leading hand - A person designated to be in charge of four or more other workers	\$5.62
Grade 2 rates are payable to inexperienced workers. After 500 accumulated hours or on completion of a harvesting season of four months, the worker shall be automatically regraded to Grade 1. However, nothing in this definition will prevent a worker being regarded prior to this time	\$5.24
Grade 1 rates are paid to experienced workers who have fulfilled the conditions for Grade 2	\$5.37
Junior workers shall be paid the following percentages of the adult workers' appropriate hourly wage specified above:	

	Grade 2 Per Hour	Grade 1 Per Hour
Under 16 years of age, 60 percent	\$3.14	\$3.22
16 years of age and under 17 years, 70 percent	\$3.67	\$3.76
17 years of age and under 18 years, 80 percent	\$4.19	\$4.30

18 years of age and under 19 years,
90 percent

\$4.72

\$4.83

Overtime

For permanent workers, time worked in excess of 8 hours in any one day or 40 hours in any one week, and for casual workers all time worked in excess of 10 hours per day or 44 ordinary hours per week, shall be overtime, and shall be paid at 1.5 times for the first three hours and at double time thereafter.

For permanent workers, all work performed on Sundays is paid at double time.

Service Allowance.

Adult casual workers who complete consecutive seasons as required with the same employer shall have their hours of service accumulated and when this equates to one year's service (1900 hours) the worker shall be paid 9 cents per hour extra; two years' hours of service the worker shall be paid 17 cents per hour extra; three years' hours of service the worker shall be paid 26 cents per hour extra. The above allowances shall not be cumulative but shall count for the purpose of calculating overtime.

2.27.7 New Zealand Nursery, Landscape, Garden Centres, Grounds and Other Related Horticultural Workers - Award (as from 29/5/86)

Sector A

The propagation, cultivation and maintenance of outdoor trees and shrubs for sale:

Minimum rates of wages.	<u>Per Week</u>
Horticultural technician	\$306.00
Journeyperson	\$293.00
Senior propagator	\$293.00
Propagator	\$275.00
Nursery worker	\$275.00
Packer/despatcher	\$275.00
Propagator's assistant	\$250.00
Nursery worker's assistant	\$250.00
Packer/despatcher's assistant	\$250.00
Packing labourer/labourer .	\$236.50

Sector B

Landscape, design, construction, maintenance, general gardening and related services:

Horticultural technician	\$306.00
Journeyperson	\$293.00
Landscape designer	\$293.00
Senior landscape construction worker	\$293.00
Landscape designer's assistant	\$275.00
Landscape construction worker	\$275.00
Landscape and gardening maintenance worker	\$275.00
Landscape construction worker's assistant	\$250.00
Landscape and gardening maintenance workers assistant	\$250.00
Labourer	\$236.50

Sector C

Propagation, cultivation and maintenance of decorative indoor plant and/or the growing of bedding, border and/or specialist general lines for sale:

Horticultural technician	\$306.00
Journeyperson	\$293.00
Senior propagator	\$293.00
Propagator	\$275.00
Propagator's assistant	\$250.00
Nursery worker	\$275.00
Packer/despatcher	\$275.00
Nursery worker's assistant	\$250.00
Packer/despatcher's assistant	\$250.00
Labourer	\$236.50

Sector D

The cultivation, maintenance and servicing of ornamental plants used for hire:

Horticultural technician	\$306.00
Hire plant advisor and/or journeyperson	\$293.00
Hire plant operative	\$275.00
Hire plant operative's assistant	\$250.00
Labourer	\$236.50

Sector E

Consumer sales of plants and related horticultural products and services:

Garden and technical advisor/technician	\$306.00
Senior garden advisor/journeyperson	\$293.00
Garden centre advisor	\$275.00
Garden centre assistant	\$250.00
Labourer	\$236.50

Sector F

The maintenance and servicing of school, recreational sports, camping, institutional or other grounds:

Horticultural technician	\$306.00
Journeyperson/grounds worker	\$293.00
Grounds worker's assistant	\$275.00

Extra rates for Qualifications Held.

A nurseryman or gardener holding a trade certificate in Horticulture or Gardening shall be paid 30 cents extra per hour.

Workers who have completed their apprenticeship in Horticulture and gardening shall be paid an additional 28 cents per hour.

Extra rates for the holder of certificates issued under the R.N.Z.I.H. Act 1953 are:

	<u>Per Week</u>
Junior	\$5.00
Intermediate or National Certificate	\$10.00
Full Diploma	\$15.00

Holders of the Diploma of Horticulture (Massey or Lincoln) shall be paid an extra \$6.00 per week.

A foreman or leading hand in charge of 3 or more workers shall be paid \$9.15 per week extra.

Service allowances

For continuous service with the same employer exceeding:

	<u>Per Week</u>
One year	\$ 5.00
Two years	\$10.00
Four years	\$15.00
Ten years	\$20.00

2.27.8 New Zealand Bowling Clubs' and other Sports Bodies Green-Keepers. (As at 4 March 1986)

Head greenkeepers and head groundsmen employed by clubs, or other sports bodies which have more than one bowling green, tennis court, croquet lawn or other playing area in use, and sole greenkeepers or groundsmen employed by any such club. \$270.00

Sole greenkeepers employed by bowling clubs which have only one green. \$254.56

Other greenkeepers or groundsmen. \$245.40

Continuous service with same club

One year \$5.05 per week additional

Two years \$5.05 per week additional

Three years \$5.05 per week additional

Greenkeeper holding New Zealand Certificate of Proficiency in Turf Culture (Lawn Bowling Green) or the New Zealand Diploma in Turf Culture shall be paid an additional \$10.66/hour.

Casual or part-time employees shall be paid \$6.14/hour

Casual or part-time sole greenkeepers shall be paid \$6.75/hour

Junior and Student workers may be employed at the following percentages of the appropriate adult rate: %

Under 16 years of age 50

16 but under 17 years of age 60

17 but under 18 years of age 75

18 but under 19 years of age 90

Thereafter 100

2.27.9 Wages of Management

For Lincoln College purposes, Wages of Management (W.O.M.) should be based on a married man's salary plus 4% of total farm capital (T.F.C.).

Use the following estimates for a married man's salary, where a house is provided.

Town Milk Dairy \$14,000-16,000

Factory Supply Dairy \$12,000-15,000

Sheep and Mixed Cropping \$12,000-15,000

Generally within the range \$13,000-\$17,000 depending on experience.

2.28 CONTRACTING CHARGES

2.28.1 Contract Heading

Minimum charge in all cases should not be less than \$16.42. per foot front per hour.

Wheat	\$ 40.42 per tonne
Barley	\$ 48.50 per tonne
Oats	\$ 60.62 per tonne
Peas and Lupins	\$ 52.64 per tonne
Grass Seed	\$116.35 per hectare
Clover and Linseed	\$132.97 per hectare

Allowance should be made for bogging, standing time for trucks and labour.

Surcharge of 20% for work on hill country.

2.28.2 Baling

Standard Bales: 78c/bale Half Tonne Bales \$10.82/bale
Collecting: 6c/bale (standard bales)

Surcharge of 20% for work on hill country.

2.28.3 Windrowing

\$54.50 per hectare - above 100 mm \$56.60 with conditioner
\$56.50 per hectare - under 100 mm \$58.60 with conditioner

2.28.4 Silage

Charged in several different ways depending on contractor.

One local contractor charges \$52 per truck load (3 to 6 tonnes). Average is 4 tonnes per load ie \$13 per tonne.

2.28.5 Hiring rates for farm equipment.

Wheeled Tractors

<u>P.T.O. Power kW</u>	<u>P.T.O. (H.P.)</u>	<u>Hourly Rate</u>
Up to 21	(Up to 29)	\$36.50
22 - 30	(30 - 40)	\$37.50
31 - 37	(41 - 49)	\$43.50
38 - 44	(50 - 59)	\$47.50
45 - 51	(60 - 69)	\$52.00
52 - 58	(70 - 79)	\$56.50
59 - 64	(80 - 84)	\$60.50
65 - 74	(96 - 99)	\$66.00
75 - 88	(100 - 119)	\$80.00
89 - 103	(120 - 140)	\$89.00
104 - 120	(141 - 160)	\$101.00

4 Wheel Drive Tractors

Up to 15	(Up to 20)	\$33.00
16 - 21	(21 - 29)	\$36.50
22 - 30	(30 - 40)	\$40.50
31 - 37	(41 - 50)	\$46.50
38 - 44	(51 - 60)	\$49.50
45 - 51	(61 - 69)	\$53.50
52 - 58	(70 - 79)	\$58.00
59 - 64	(80 - 85)	\$65.00
65 - 74	(86 - 99)	\$72.00
75 - 88	(100 - 119)	\$84.50
89 - 103	(120 - 139)	\$86.50
104 - 120	(140 - 159)	\$94.50
121 - 133	(161 - 190)	\$102.50
134 - 170	(191 - 230)	\$129.50
171 - 190	(231 - 253)	\$136.50

Track Machines

23 - 41	(40 - 55)	\$45.00
42 - 49	(56 - 66)	\$55.00
Over 49	(Over 66)	\$69.00

Extra Implements - plus the following extra charges

Up to 30	\$ 5.90
31 - 44	\$ 8.00
45 - 55	\$11.50
59 - 74	\$16.80
75 - 88	\$19.45
88 - 103	\$21.40
104 - 120	\$24.70
Over 120	\$27.80

Or plus the following extra charges for Rotary Hoes:

Up to 1.3 metres	\$ 8.35
1.3 - 1.5 metres	\$ 9.75
1.5 - 1.8 metres	\$11.50
1.8 - 2.0 metres	\$13.95
2.0 - 2.3 metres	\$16.40
2.2 - 2.5 metres	\$19.45
2.5 to 3 metres	\$27.00
Over 3 metres	\$34.60
Sickle mowers	\$ 8.30
Disc mowers	\$13.45
Hay rakes	\$ 7.40
Hay tedder	\$10.80
Special equipment by negotiation.	

Drilling per hectare \$48.15

Direct Drilling per hectare \$60.00

2.28.6 Contract Dipping

Sheep Dipping - \$36/1000 (1 man and machine)
 4 litres of wash per head
 2.1 c extra per litre wash

2.28.7 Shearing Rates

(Approximate only, for Canterbury Conditions)

Shearing open	Full Wool.	Machine per 100	\$82.50
		Blades per 100	\$95.00
	Bellied /100		\$78.50
	Cover lamb /100		\$88.00
	Crutching /100		\$30.00
	Dagging /100		\$25.00
	Belly crutching /100		\$36.00
	1/2 belly crutching /100		\$34.00
	Eye wiggling Extra per 100		\$ 1.00
Classing rate/100			\$22.00
Shedhand rate/hour			\$ 9.50
Presser rate/hour			\$12.50
Contract shearing /100		Machines	\$150.00
		Blades	\$175.00

2.28.8 Ground Spreading of Fertiliser

Ordinary Spreader
 Under 4ha per ha \$ 6.50

Over 4ha per ha	\$ 4.00
Precision spreader per ha	\$13.00

Stony, swampy and hill country - extra by arrangement

2.28.9 Aerial

WHIRL-WIDE HELICOPTERS

Crop Spraying

(40 to 60 litres per ha)

0 - 10 ha	per ha	\$26.00
10 - 15 ha	per ha	\$25.00
16 - 20 ha	per ha	\$24.50
21 - 25 ha	per ha	\$24.00
26 - 30 ha	per ha	\$23.50
Over 30 ha		\$23.00

(80 to 100 litres per ha)

Base price 0 - 10 ha per ha \$32.00 (discount for area as above)

Nitrogen Application on Crops

Hg/Ha	up to 10 ha	15 ha	20 ha	25 ha	30 ha	over 30 ha
75 - 125	\$26.00	\$25.00	\$24.50	\$24.00	\$23.50	\$23.00
130 - 180	\$28.50	\$27.50	\$27.00	\$26.50	\$26.00	\$25.50
190 - 240	\$31.00	\$30.00	\$29.00	\$28.00	\$27.00	\$26.00
250 - 300	\$33.50	\$32.00	\$31.00	\$30.00	\$29.00	\$28.00

Minimum price for one off jobs is \$100.

Brushweed Spraying

400 - 440 l/ha	double pass	\$120-\$160 per ha
200 - 220 l/ha	double pass	\$ 75-\$100 per ha
200 - 220 l/ha	single pass	\$ 60-\$100 per ha
100 - 110 l/ha	single pass	\$ 60-\$ 80 per ha

In addition to the above rates machines are operated at the following hourly rates:

Squirrell A.S. 350	\$840.00 per hour
Hughes 500 D	\$810.00 per hour
Bell 206 Jet Ranger	\$750.00 per hour
Soloy Hiller	\$720.00 per hour
Hughes 300	\$500.00 per hour

ROWLEY AVIATION, AMBERLEY

As a guide charges are made on the following basis:

Fixed wing aircraft (pasture mix, fungicide and insecticides)
\$16.50 per tonne.

Fertiliser \$40 per tonne (average haul 1.5 miles)

HELICOPTERS (NZ LTD)

110 litres	= \$ 40/ha
220 litres	= \$ 80/ha
330 litres	= \$115/ha
440 litres	= \$140/ha

Aerial spraying for spot work and large blocks may be negotiated on the basis of a rate per flying hour as follows:

Bell 206B Jetranger	\$690/hour
AS350B Squirrel	\$900/hour
SA315B Lama	\$900/hour

2.28.10 Miscellaneous

Gorse cutting	\$43.40 per hour
Tree topping	\$99.45 to \$110.45 per hour
Potato Harvesting	\$139.00 per hour or \$41.80/t plus extra labour

2.29 SELLING CHARGES

2.29.1 Yard Fees

Addington:

Sheep and lambs	.37	Calves	\$2.14
Fat cattle	\$2.57	Bulls	\$4.59
Store cattle	\$2.14	Porkers	.92
Vealers	\$2.14	Baconers	.92
Dairy cows	\$2.57	Store pigs	.73

Amberley:

All sheep 23c (includes 3c loading).

Coalgate:

Sheep	.20	Ewes and Lambs	.20
Wethers	.20	Cows	\$1.20
Calves			\$1.20

Culverden:

Sheep	.37	Heifer Calves	\$2.14
Ewes and Lambs	.37	Dairy Calves	\$2.14
Wether Lambs	.37	Dairy Cows	\$2.57
Cattle	\$2.14	Steers	\$2.14

Hawarden:

All sheep 12c

Little River:

All sheep 25c

Sheffield:

Sheep	.25	Flock Rams	\$1.00
Lambs	.25	Heifers	.80
Cattle			.80

Cheviot:

Calves	\$1.50	Adult cattle	\$2.00
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Oxford:

Sheep	.20	Rams	35 c
Fat cattle)	\$1.25		
Store cattle)	plus loading/unloading fee		
Dairy cattle)	of 10c per head		
Bulls)			

2.29.2 Commissions on Stock sold through a Stock and Station Agent

	<u>Sale Yards</u>		<u>Clearing Sales</u>
Sheep	4.75%	Sheep	5.50%
Fat Cattle	4.75%	Store Cattle	5.50%
Store Cattle	4.75%	Pigs	6.50%
Vealers	4.75%	Dairy Cows	7.50%
Bulls Stud	7.50%	Implmnts & Sun.	10.00%
Dairy Cattle	7.50%	Furniture	15.00%
Pigs	5.75%	Horses	8.00%
Deer	4.75%	Stud Cattle	7.50%
Grazing	10.00%	Stud Sheep	5.75%
Goats - P/bred, G1	7.50%	Motorised plant	8.00%
- G2 to Feral	4.75%	Dogs	7.50%

2.29.3 Wool Charges

Individual firms set their own charges but following are indications of the current situation for the 1986/87 season.

Consolidated Selling Charge	0.0 cents/kg
Consolidated Selling Bin	11.020 cents/kg
Consolidated Selling Interlot	11.020 cents/kg
Consolidated Selling Group	9.975 cents/kg
Consolidated Selling Stack	9.975 cents/kg
Consolidated Selling P.S.T.	9.975 cents/kg
Group Charge	631.0 cents/bale
Group Charge Fleece	631.0 cents/bale
Group Charge Oddments	631.0 cents/bale
Interlot Charge	11.0 cents/kg
Interlot Charge Fleece	11.0 cents/kg
Interlot Charge Oddments	11.0 cents/kg
Binning Charge	0.0 cents/kg
Binning Charge Fleece	11.250 cents/kg
Binning Charge Oddments	13.0 cents/kg
Class Charge	0.0 cents/kg
Class Charge Fleece	9.75 cents/kg
Class Charge Oddments	13.0 cents/kg
Blend Charge	7.15 cents/kg
Blend Charge Fleece	7.15 cents/kg
Blend Charge Oddments	7.15 cents/kg
Repack Charge	452.0 cents/bale
Reduce Charge	518.0 cents/bale
Fleece Decotting Charge	11.250 cents/kg
Testing Fees	0.0 cents/kg
Lot Wool Micron	0.920 cents/kg
Bin Wool Testing	1.995 cents/kg
Lot Wool Testing	0.800 cents/kg

Bin Wool Testing	1.550 cents/kg
Colour Test	572.0 cents/line
Delivery	600.0 cents/bale
Wool Board Levy	6.0 cents/kg
Insurance	0.160 cents/kg
Retention	0.0 cents/kg

SECTION 3

ENTERPRISE ANALYSIS

3. ENTERPRISE ANALYSIS

3.1 Introduction

Farmers in many parts of New Zealand have a range of alternative crop and livestock activities which may make up the farm enterprise.

The choice of which alternatives to use will be dictated by many factors, including management and the ranking of the profitability of each activity. Profitability of each enterprise may be measured by the Gross Margin technique, which is the Gross Revenue minus the Variable Costs associated with that particular activity.

ie.

VARIABLE COSTS

Sheep

Stock purchases
Animal health
Feed purchases
etc.

Crop

Seed
Fertiliser
Cultivation

FIXED COSTS

Interest, Rates.
Insurance, Rent
overheads etc.

Basic assumptions are required, one of which is that the fixed cost structure is not altered by the activity being considered, if this is, then partial budgets or detailed budgeting may be required. Gross Margins also assume linearity ie. that each additional unit of production has the same costs and revenues as all other units and that each unit can be operated independently of the others.

When using the G.M. approach to determine a better farm plan, first list the alternative enterprises and estimate Gross Margins for each. Make sure that the levels of production are relative to each other. Then draw up various rotations taking into account the farmer's preferences and any constraints influenced by soils, climate, capital, etc. The Gross Margin for each enterprise in the rotation (i.e. both crops and stock) will be added together and then averaged per hectare per year. The rotation having the highest G.M. can then be tested by drawing up the whole farm budget to confirm it is a better farm plan.

3.2 Worked Examples of Crop, and Horticultural Gross Margins 1987

3.2.1 1st Wheat Crop (Oroua ex pasture):

Programme:

Cultivation:

The paddock is disced twice in March, ploughed in April, heavy harrowed, grubbed and heavy harrowed in May, drilled in late May along with 125 kg/ha of superphosphate.

Weed and Pest Control:

The crop is sprayed after the 2 leaf stage but before third joint is detectable in the wheat crop, for the control of various weeds and wild oats.

Harvesting:

The crop is headed in January by contract stored in on-farm bulk silos until August. A firebreak is ploughed after the crop is harvested and the stubble is raked up and burned in late January.

Direct Costs (per hectare):

Cultivation:	5 hrs/ha @ \$23.28/hr	\$116.40
Seed:	130 kg/ha seed @ \$680/t treated, e.g. Baytan	\$ 88.40
Fertiliser:	125 kg/ha super phosphate @ \$181.48/t on farm	\$ 22.69
Weed Control:	e.g. M.C.P.A. @ 3 litres/ha @ \$5.54/litre plus spraying @ .33 hrs/ha @ \$23.28/hr Wild oat spray (e.g. Avenge): 5 litre/ha @ \$24.05/litre plus spraying @ .33 hrs/ha @ \$23.28/hr	\$ 16.62 \$ 7.68 \$120.25 \$ 7.68
Rust Control:	e.g. Bayleton @ 500 ml/ha @ \$72.46/litre plus spraying @ .33/hr @ \$23.28/hr	\$ 36.23 \$ 7.28
Cartage:	From field to silos @ \$3.65/ha	\$ 3.65
Raking and Ploughing Firebreak:	.1 hr @ \$23.28/hr	\$ 2.33
Heading:	4 tonne @ \$40.42/tonne	\$161.68
Cartage:	From silo to rail (by contract) @ \$13.68/t (20 km distance)	<u>\$ 54.72</u>
TOTAL DIRECT COSTS		<u>\$646.01</u>

Gross Revenue:

Yield: 4.00 t/ha

Price: \$210.00/t \$ 840

TOTAL REVENUE \$ 840

GROSS MARGIN/HA \$ 194

3.2.2 Glasshouse Tomatoes**Assumptions:**

1500 square metre of Glasshouse crop planted early July and harvested over 9 months from late September to mid-May. Spaced at 3.6 plants per m². Yield 20 kg per sq. metre. Heated by coal burner.

Direct Costs:

Soil tests - 5 at \$21.50 \$ 107.50

Straw - 160 bales at \$1.50 \$ 240.00

Soil Fumigation - contract rates \$1.26/m² \$1890.00
 Base Fertiliser (June)- Serpentine Superphosphate 225 kg
 at \$227/tonne \$ 51.08

Hydrated lime - 225 kg at \$10.00/tonne \$ 2.55

Sulphate of Potash - 225 kg at \$65.00/50kg bag \$ 292.50

Epsom Salts - 160 kg at \$58/100 kg \$ 83.20

Liquid Feed - Nitrate of Potash 210 kg at \$90.00/50kg bag \$ 378.00

Urea - 43 kg at \$405.60/tonne \$ 17.44

Epsom Salts - 63 kg at \$50/100 kg \$ 31.50

Plants - 5500 at \$190 per 1000 \$1045.00

Coal for heating - 70 tonnes at \$125/tonne \$8750.00

Twine - 20 balls at \$13.00 \$ 260.00

Sprays - Eurapen 2 kg at \$39.12/kg \$ 78.24

Lannate 2.5 litres at \$20.90 \$ 52.25

Ambush 1 litre at \$93.50/500m \$ 170.00

Ronilan 1 litre at \$79.26/litre \$ 79.26

Polyram 6kg at \$7.00/kg	\$ 42.00
Labour (over and above owner) - 28 hrs/week for 36 weeks @ \$6.50/hour	\$6552.00
Packing Cases - 4.5 kg 6667 cases at 50c = \$3334.00 (- allowance (.38c) = \$2533.00)	\$ 801.00
Cartage - 21c per case	\$1400.07
Commission - 10%	\$7676.00
Vegetable Fed Levy - .25%	\$ 191.90
<u>Direct Costs</u>	<u>\$30190.59</u>

Yield				\$
Sept	2%	600	4.88	2,928
Oct	19%	5,700	4.55	25,935
Nov	16%	4,800	3.77	18,096
Dec	10%	3,000	2.3	6,990
Jan	12%	3,600	1.66	5,976
Feb	15%	3,500	1.16	5,220
Mar	13%	3,900	1.11	4,329
Apr	7%	2,100	1.66	3,486
May	6%	1,800	2.11	<u>3,798</u>

GROSS INCOME 76,758

Gross Margin for 1500 m² 46,567

Gross Margin per m² 31.04

3.3 SHEEP GROSS MARGINS

(Prepared by M.J. McGregor, January 1987)

Introduction

The following two examples show relativity between the same breed of sheep (Corriedale) but under DIFFERENT MANAGEMENT POLICIES. It must be stressed that the prices and costs used approximate those ruling at 20 January 1987.

The gross margins should therefore be adjusted as policies, prices and cost parameters, change.

Note: Gross margins are calculated for 1000 ewes. This allows flock composition, deaths, sales and purchases to be shown as whole numbers. The gross margins calculated only apply to small changes in stock numbers as changes in the order of 1000 ewes would require additional labour, feed, etc.

SHEEP RECONCILIATION

Stock Units Opening Rate 1/7/81	Class of Stock Breed	Opening Nos. @ 1/7/81	Nat. Incr.	Killed	Deaths and Losses	Sales	Purch- ases	Closing Nos. @ 30/6/82	Class of Stock	Closing s.u.'s 30/6/82
Ewes										
	Lambs		550							
	Unmated Hqts	0				550		0	Unmated Hqts	0
	Mated Hqts								Mated Hqts	
	Ewes: 2th								Ewes: 2th	
	4th								4th	
	6th								6th	
	4yr								4yr	
543	1.0	543					543	543	5yr	543
457	1.0	457		10	32	54		457	6yr	457
					27					
	Aged TOTAL EWES					420		0	Aged TOTAL EWES	
1000	1.0	1000						1000		1000
Wethers - m.s.										
	and wether Lambs		550							
6	0.6	10		10		530		10	Hqts	6
				10						
	2th							0	2th	
	Aged TOTAL WETHERS								Aged TOTAL WETHERS	
6	0.6	10						10		6
Rams										
	Lambs									
	Hqts								Hqts	
4	0.8	5					5	5	2ths	4
12	0.8	15		4	1			15	M.Age	12
	Aged TOTAL RAMS								Aged TOTAL RAMS	
16	0.8	20						20		16
	TOTAL SHEEP								TOTAL SHEEP	
1022		1030	1100	34	60	1554	548	1030		1022
		(a)	(b)	(c)	(d)	(e)	(f)	(g)		

LAMBING PERFORMANCE (Based on Ewes to Ram)
 Failing = NA % Survival to Sale = 110 %

DEATH RATES

Ewes = 6 % Hqts. = NA % Lambs = NA Rams = 5 % Total (1) must = Total (2)

CULLING RATES

Ewes = 10%

Rams = 25%

RECONCILIATION

(1) Totals a + b + f = 2678

(2) Totals c + d + e + g = 2678

Example 1.

This example gross margin is for a Corriedale 2 year flock system, buying 5 year old ewes annually, which are all mated to an export lamb sire.

Production Parameters:

110% lambing (survival to sale); 10% first year ewes culled; death rate 6%; ewes clip 4.0 kg wool per head; lambs not shorn.

Gross Revenue (per 1000 ewes):

	\$	c
Lamb sales - 1,080 prime lambs @ \$20.55 (13.5 kg lamb meat @ 160.0c/kg = \$21.60 plus skin @ 0.75 kg woolpull @ \$9.40 minus \$10.45 charges)	22,194.00	
Cull ewe sales - 474 cull ewes to works @ \$9.71 (22.5 kg ewe meat @ 77.0c/kg = \$17.33 plus skin and 0.5 kg woolpull @ \$6.80 minus \$14.42 charges)	4,602.54	
Wool sales - 4000 kg @ \$3.40 per kg net (1000 sheep @ 4.0 kg allowing for deaths. Wool price is gross less 35c/kg)	13,600.00	
GROSS REVENUE	\$40,396.54	

Direct Costs (per 1000 ewes):

Replacement purchase - 543 @ \$16.00	8,688.00
Shearing (shearers only) - 1000 sheep @ \$82.50/100	825.00
Tup crutch - 457 sheep @ \$30/100	137.10
Main crutch - 1015 sheep @ \$36/100	365.40
Drenching - 2 drenches @ 19.42c/dose for 1015 Sheep (ewes are drenched once before tupping and again before lambing)	394.23
- 1100 lambs : 50% drenched once, 30% drenched twice, lamb drench 7.76c/dose	68.93
Vaccination - triple vaccine, 980 ewes @ 26.67c/sheep	261.37
Eartags, footrot and docking	160.00
Dipping - purchased ewes have been dipped, 457 ewes @ 12c/sheep.	54.84
Woolshed expenses - including woolpacks, twine, glue, emery paper and shearing plant expenses approximate cost = 38c/head	380.00

Ram costs - 2 per 100, 4 year life, 5 @ \$250/ram	1250.00
Cartage - prime lambs to works, 1080 @ \$0.90 each	972.00
- cull ewes to works, 474 @ \$1.19 each	564.06
- replacement ewes from North Canterbury, 543 @ \$2.33 each	1210.89
- wool, 4000 kg 16 bales @ \$5.31/bale	84.96
(Note: All cartage based on 32 km travel except for replacement ewes, 80 km)	
TOTAL DIRECT COSTS	\$15,416.78
GROSS MARGIN PER 1000 EWES	\$24979.76
GROSS MARGIN PER EWES (+ 1000)	\$24.98
GROSS MARGIN PER STOCK UNIT (+ 1022)	\$24.44

Summary:

With a gross revenue of approximately \$40 per ewe and expenses of about \$15 per ewe, the gross margin is in the vicinity of \$25 per ewe for a prime lamb 2 year flock system. The direct costs per ewe (excluding replacement cost) are approximately \$6.75.

The gross margin per stock unit is calculated by dividing the gross margin (per 1000 ewes) by the total stock units (1022 stock units). This gives a value of \$24.44 per stock unit.

Example 2.

This example gross margin is for a Corriedale flock, selling genuine 5 year old ewes and breeding own replacements. Ewes are on hand for 4 lambings. All ewes are mated to a Corriedale ram. Hoggets are culled as two tooth (20%). Surplus ewe lambs are sold store. 80% of the wether lambs are sold prime for export, the remainder (20%) being sold as stores. Lambs are not shorn but hoggets are.

Production parameters:-

93% lambing; 5% ewe culling; 20% two tooth culling; death rate 4%; ewes clip 4.1 kg of wool as do the hoggets.

Gross Revenue (per 1000 ewes):-

\$ c

Lamb sales	- 364 prime lambs @ \$20.55 (13.5 kg lamb meat @ 160.0c/kg = \$21.60 plus skin and 0.75 kg woolpull @ \$9.40 minus \$10.45 charges	7,480.20
	- 180 store lambs @ \$11.00	1,980.00
Cull ewe sales	- 75 two tooths @ \$25.00	1,875.00
	- 189 five year olds in yards @ \$4.00	2,646.00
	- 50 cull ewes to works @ \$9.71 (22.5 kg ewe meat @ 59.5c/kg = \$17.33 plus skin and 0.5 kg woolpull @ \$6.80 minus \$14.42 charges)	485.50
Wool sales	- 4100 kg @ \$3.40 per kg net (1000 sheep @ 4.1 kg allowing for deaths. Wool price is gross less 35c/kg)	13,940.00
	- 1558 kg @ \$3.40 per kg net (380 hoggets @ 4.1 kg allowing for deaths)	<u>5,297.20</u>

GROSS REVENUE

\$33,703.90

Direct Costs (per 1000 ewes):-

Shearing (shearers only)	- 1000 sheep @ \$82.50/1	825.00
	- 380 hoggets @ \$88.50/100	313.50
Tup crutch - 990 ewes @ \$30/100		297.00
Main crutch - 990 ewes @ \$36/100		356.40
Drenching - 2 drenches @ 19.42c/dose for 1015 sheep (ewes are drenched once before tupping and again before lambing)		394.23
	- lambs, 1850 doses @ 7.76c/dose (replacements drenched 3 times, stores twice, and primes once)	143.56
Vaccination - triple vaccine, 980 ewes @ 26.67c/sheep		261.37
	- triple vaccine, 370 hoggets @ 26.67c/sheep	98.68
Eartags, footrot and docking		350.00
Dipping	- 990 ewes @ 12c/head	118.80
	- 376 hoggets @ 12c/head	45.12
	- 660 lambs @ 12c/head	79.20

Woolshed expenses -	including woolpacks, twine, glue, emery paper and shearing plant expenses, approximate cost = 38c/ewe and 26c/hogget	477.76
Ram costs	- 2 per 100, 4 year life, 5 @ \$250/ram	1250.00
Cartage	- prime lambs to works, 364 @ \$1.86 ea.	677.04
	- store lambs to yards, 180 @ \$1.64 ea.	295.20
	- cull two toothed and five year old to yards, 264 @ \$2.60 each	686.40
	- cull ewes to works, 50 @ \$2.25 ea.	112.50
	- wool, 5658 kg @ (22 bales @ \$9.46/bale	208.12

(Note: All cartage rates are based on 97 km travel,
the distance from North Canterbury to Christchurch.)

Selling charges	- Yard fees, 444 sheep @ 37c/sheep	164.28
	- Commission, \$6501 @ 4.75%	<u>308.80</u>

TOTAL DIRECT COSTS	\$7,462.96
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GROSS MARGIN PER 1000 EWES	\$26,240.94
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GROSS MARGIN PER EWE (: - 1000)	\$26.24
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GROSS MARGIN PER STOCK UNIT (: - 1248)	\$21.02
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Summary:

The factors having the greatest effect on the two examples presented are:

1. Lambing percentage
2. Lamb sale price
3. Wool clip per head
4. Wool price
5. Cull ewe price (both at yards and at works)

It is stressed that the example gross margins use one set of price and production parameters and, when used in practice, some account must be taken of likely variations to give a range of expectations.

It is interesting to note the comparison with past years:

	<u>Gross Margin Per Stock Unit</u>				
	83/84	84/85	85/86	86/87	% Change (from last year)
Two year flock	27.78	32.16	19.27	24.44	+ 26.8%
Breed own replacements	20.43	23.07	17.44	21.02	+ 20.51%

The breeding own replacements policy shows wider fluctuations in the gross margin than the two year flock policy. The two year flock farmer is able to work on a margin for purchase and sale of ewes where as the store sheep farmer has no such margin available.

Also, of interest is that the gross margins have increased on the previous year. This is a reflection of the higher prices paid for lambs and wool in the 1986/87 season. However, the 1986/87 gross margins are only approaching 1983/84 values in nominal terms. This signifies a considerable drop in sheep farmers real income.

Again, it must be stressed that these gross margins are examples only and cannot be compared with one another as different management policies have been used. As the price, cost, and production parameters change throughout the season, the gross margins must be revised.

3.4 Dairy Cows (South Island Seasonal Supply)

Contributed by K.R. Bevan, January 1986 (updated January 1987)

<u>Performance Level</u>	<u>Low</u>	<u>Medium</u>	<u>High</u>	<u>Very High</u>
Milkfat	130	150	180	210
Milkfat Value (1)*	325	375	450	525
Cull sale (2)	56	56	56	56
Calf sales (3)	60	60	60	60
TOTAL REVENUE (A)	441	491	566	641
<u>Variable Costs (Animal)</u>				
Shed expenses (4)	8	8	8	8
Electricity (5)	16	16	16	16
Transport (6)	9	9	9	9
Bull purchase (7)	4	4	4	4
Breeding exp. (8)	22	22	22	22

Health (9)	33	33	33	33
TOTAL VAR. COSTS (B)	92	92	92	92
GROSS MARGIN per cow (A-B)	347	397	472	547

Stocking Rate (2.5 cows per ha)
Performance level

Tot revenue /ha	1103	1228	1455	1603
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* See Notes

<u>Variable costs</u>				
Animal	230	230	230	230
Pasture (10)	193	193	193	193
Conservation (11)	27	27	27	27
TOTAL VAR. COSTS	450	450	450	450
GROSS MARGIN /ha	653	778	965	1153

N.B. Increased performance results from greater utilisation of existing forage rather than similar utilisation of an increased amount of forage.

NOTES

1.	130	150	180	210
2.50	325	375	450	525
3.00	390	450	540	630
3.50	455	525	630	735
4.00	520	600	720	840

2. **Cull cows:** Assuming a replacement rate of 20 (including 2% for death rate),
2 bulls @ \$300 per hd every 3 years = \$200 per 100 cows.
18 culls @ \$300 per cow = \$5400 per 100 cows.
= \$56 per cow

3. **Calf Sales:** Assuming 7% empty, 10% calf deaths before sale and a 40:52 female to male ratio, therefore 93 calved

45 heifers	48 bulls
<u>4 deaths</u>	<u>5 deaths</u>
41	43

Retain 27 heifers as replacements (includes 7% deaths)

Therefore, 14 heifers @ \$30 per head	=	\$ 420
43 bulls @ \$130 per head	=	\$5590
		<u>\$6010</u>
		= \$60.10 per cow

4. Shed expenses: Includes filters, inflations, detergent, buckets, etc
MAF Advisory Services Monitor, March 1986 = \$9.00 per cow.

5. Electricity: All electricity. MAF Advisory
Services Monitor, March 1986 = \$16.00 per cow

6. Transport: Assuming destination 50 km's
2 bulls every 3 years @ \$14.06 = \$9.37
18 culls @ \$14.06 per cow = \$253
64 calves @ \$6.71 per calf = \$429
\$691.81 /100cows = \$6.02 per cow

7. Bull purchase: 2 @ \$600 per head every 3 years = \$4.00 per cow

8. Breeding expenses: - composed of the following:

- Herd testing (bi-monthly, self sample)
- Herd fee for 100 cows = \$120
- Plus \$6.85 per cow, = \$8.05 per cow
plus somatic cell counting @ \$1.70 per cow (3 counts)
= \$1.70 cow
- AB, technician inseminated using 'bull of the day'
\$11.20 (first 100) \$10.00 (thereafter) given 1.4
services per cow with returns free of charge during
mating period, = \$11.20 per cow
- Pregnancy test, at 80 cents per cow, vet @
\$60 per hour and 42 cents per km, assuming,
8 cows tested, 60km travel (round trip),
half an hour time. = 61c per cow.

Total breeding expenses = \$21.56 per cow

9. Health: - composed of:

- Internal parasites, Systamex @ \$94.54 per litre
- 35 thins plus R3yr's @ 15 ml per head = \$.49 per cow
- 25 R2yr's @ 10 ml per head = \$.24 per cow
- 27 R1yr's @ 5ml/dose (6 doses) = \$.76 per cow
= 1.49 per cow
- External parasites, Warbex 5 ml per 50 kg bwt
@ \$30.92 per litre
- 75 cows (at drying-off) 450 kg = 45 ml = \$1.39 per cow

- 25 R2 yr's, 400kg = 40 ml = \$0.27 per cow
- 27 R1yr's, 100 kg = 10 ml = \$0.08 per cow
- 2 bull, 650 kg = 65 ml = \$0.04 per cow
- = \$1.76 per cow

- Mastitis, streptopen @ \$18 per 20, assuming 2.5
quarters treated per week for 20 weeks. = 45c per cow

- Dry cow therapy, streptopen dry cow @ \$106.80
per 80 syringes, assume all previously
infected quarters treated only. = 67c per cow

- Metabolic disorders, bloat, bloateric 2 in 1
@ \$148 per 20 litres, dose 20 ml pre-mix
twice daily for 50 days, = \$14.80 per cow

- Magnesium, causmag @ \$650 per tonne, providing
.75 kg per cow per week for 12 weeks, = \$5.85 per cow

- Sodium selenate @ \$28.96 per 20 litres (\$6.45 per
litre), drench monthly @ 6 ml per cow, = 46c per cow

- Pessaries, teramycin farming pessaries @
\$24.90 for 10, at 1 per cow and assuming
treatment of 5 cows, = 10c per cow

- Induction, drugs at \$11.50 one vaccination
\$16.50 two vaccinations
Assuming vet 1 hour on farm, 60 km for travel
10 cows induced of which 4 require 2
vaccinations = \$2.20 per cow

- Leptospirosis, lept 3 @ \$53/100,
75 cows = \$0.40 per cow
- 25 R2yr's = \$0.13 per cow
- 2hrs vet, 60km travel = \$1.45 per cow
- 27 R1yr's (2 vaccinations) = \$0.29 per cow
- 1 hr vet, 60km (x 2) = \$1.70 per cow
- = \$3.97 per cow

- Teat spray, 20 1 blu-gard @ \$123 = \$1.23 per cow
- = \$32.98 per cow

Forage hectares:

Additional to animal costs are those which accrue to the feeding of the animal, as such gross margins have to be adjusted to a forage hectare basis. Forage costs can be attributed to either:

- pasture,
- conservation.

Assuming a 40.5 ha unit.

10. Pasture: The following costs can be identified;
 Fertiliser, MAF Farm Monitor, March 1986,
 = \$157 per ha, and includes pasture renovation.

Irrigation, Mid-Canterbury borderdyke, = \$20 per ha per year,

Pasture renovation, assume renovating 3 ha per year, direct- drilling @ \$50 per ha (include tractor),

Roundup @ 3 l per ha @ \$30.40 per litre = \$91.20/ha

Wetting agent @ \$24 per litre @ 200 ml /ha = \$2.40/ha

Seed mixture, 5kg Pitau Clover @ \$3.15 /kg = \$15.75

15kg Nui Ryegrass @ \$2.20 /kg = \$33.00

5kg Manawa Ryegrass @ \$1.85/kg = \$9.25

Total seed = \$58/ha

Pasture costs per renovated ha = \$201.60 per
 ha (x 3)

= \$605 for unit

= \$14.93 per ha

= \$192 per ha

11. Conservation (silage): Assuming 8 ha of silage harvested per year.

Contractor, includes wilting, cartage and stacking

@ \$12 per tonne, harvesting 10 t/ha = \$120 per ha (x 8) = \$960 for unit

Mowing, assuming 5 ha per 8 hr day for a 50kW tractor,

@ 14 litre per hr @ \$67.3 cents per litre

= \$15.08 per ha (x 8)

= \$121 for unit

= \$1081 Total Conservation cost for unit

= \$26.29 per ha

3.5 CASH FLOWS FOR LONG TERM CROPS

Most Horticultural crops cannot be compared on an annual basis as establishment may take many years.

The following is an generalised example of how to cost out a long term crop. Costs and prices used are accurate for 1986.

KIWIFRUIT (10 ha)

Costs and returns of establishing a 10 ha Kiwifruit orchard are outlined here.

Land cost, debt servicing, drawings, taxation, overheads (e.g. rates) and non cash items such as depreciation are not included.

ESTABLISHMENT EXPENSES

Year 1

Shelter	7000 cuttings (Willow) @ 15c	\$1050	
	Labour @ \$5.50/hour (35 hrs)	\$193	\$ 1243
Drainage	\$1600/ha		\$16000
Irrigation	Pump, mainlines and some feeder lines (for shelter) installed, rest Year 2 Total cost approx. \$1500/ha, 70% paid in Year 1		\$10500

Year 2

Ground Preparation

8 hours @ \$15.50	\$ 124
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Support Structure

T bar structure with 6 m between posts		
Length of rows - 15 m box type end structure for straining		
2 metre T bar with 3 wires		
Total material cost \$4000/ha	\$40000	
Labour - post driving, 3000 @ \$0.70 ea	\$ 2100	
Assembly and wiring 750 hours @ \$5.50	\$ 4125	\$46225

Irrigation	Balance (See above)	\$ 4500
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Plants	Grafted plants @ \$4.60 each - 5300 including 5% replacmenets	\$24380
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Year 4

Grassing Down	Ground cover between rows (Ryegrass) \$50/ha	\$ 500
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Year 5

Frost Protection

Overhead Sprinklers - \$7000/ha including construction	\$70000
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CAPITAL ITEMS

Year 2	Implement Shed	\$ 8000
	Tractor (secondhand)	\$ 7000
	Roller Tiller	\$ 1700
	Fertiliser Spreader	\$ 1650
	Weed Sprayer	\$ 1000
	Other	\$ 2500
Year 3	Pest and Disease Sprayer	\$10000
Year 4	Mower	\$ 3500
	Forklift	\$ 3000
	Bins, 30 @ \$45	\$ 1350
	Other equipment	\$ 1000
Year 5	Large tractor (Second hand)	\$16000
	Bins, 30 @ \$40	\$ 1350
Years 6 & 7	15 Bins in each year @ \$45	\$ 675
		\$ 675

ANNUAL COSTS

Shelter trimming		
	5 hours per ha @ \$5.50	\$ 275
Interrow cultivation		
	Years 2 and 3 only as grass down in Yr 4	
	20 minutes/ha @ \$15.50/hr	\$ 5
Fertiliser	Initial allowance of \$180 per ha base dressing depending on soil test.	\$ 1800
	Maint. - 100 kg Urea @ \$456.75/t	\$45.68
	- 200 kg Potassic Serpentine Super @ \$250/t	\$50.00
	Total per ha	\$95.68
	Total 10 ha	\$ 957
Weed, Pest and Disease Control		
	Materials and Labour	
	- Year 3	\$ 810
	- Year 4	\$ 1288
	- Year 5 onward	\$ 1587
	Year 1 (Shelter only)	\$ 55
	Year 2 (Shelter only)	\$ 200

Beehives	\$70 per hive, need 7/ha, Year 3 on	\$ 4900
Pruning	Summer and winter @ \$5.50 per hour	
	Year 2 150 hours	\$ 8250
	Year 3 100 hours	\$ 5500
	Year 4 125 hours	\$ 6880
	Year 5 150 hours	\$ 8250
	Year 6 200 hours	\$11000
	Year 7 onward 250 hours	\$13750
Mowing	1 hour per ha @ \$15.50, Year 4 on	\$ 16
Harvesting	Labour 7 hours per tonne @ \$5.50	\$39.50
	Freight to packhouse in bin \$8.50/tonne	\$ 8.50
		\$48.00
Yield	Year 4 3.5 tonnes per ha @ \$47	\$ 1680
	Year 5 7 tonnes per ha @ \$47	\$ 3360
	Year 6 14.0 tonnes per ha @ \$47	\$ 6720
	Year 7 21.0 tonnes per ha @ \$48	\$10080
	Year 8 onwards 24 tonnes per ha \$48	\$11520
Packing	This is usually expressed as cost per tray for export fruit and on a per tonne basis for locally consumed fruit	
	Cost per tray for export fruit \$2.90 (includes cost of tray, grading and producing charges, levies and cool storage), 3.6kg/tray per tonne	\$ 805
	Local fruit approximately \$125/tonne	\$ 125

Therefore:	Yr 4	Yr 5	Yr 6	Yr 7	Yr 8
Total Yield tonnes	3.5	7.0	14.0	21.0	24.0
% Export	50	60	80	90	90
Total Export tonnes	1.75	4.2	11.2	18.9	21.6
Cost	1409	3381	9016	15214	17388
% Local	50	40	20	10	10
Total Local tonnes	1.75	4.8	2.8	2.1	2.4
Cost	210	576	336	252	288
Total Pack. Cost/ha	1619	3717	9352	15466	17676
Total for Year \$	16195	37170	93520	154660	176970

Repairs and Maintenance
Charged on % of cost price
Building 2.5%
Structures 2.5%
Plant and Machinery 5%

Therefore:

	<u>Bldg</u>	<u>Strt</u>	<u>Machinery</u>					
			<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>
Year 2	200							
Year 3	200	1155	693					
Year 4	200	1155	693	500				
Year 5	200	1155	693	500	443			
Year 6	200	1155	693	500	443	868		
Year 7	200	1155	693	500	443	868	34	
Year 8 on	150	693		500	443	868	34	34

Totals

Therefore:	Year	2	\$ 200
		3	\$2048
		4	\$2548
		5	\$2991
		6	\$3859
		7	\$3893
		8	\$3927

REVENUE

Export \$8/tray i.e. \$2.22/kg (assuming 3.6 kg/tray) Local/70c/kg

	<u>Export</u> <u>per ha</u>	<u>Revenue</u> <u>per ha</u>	<u>Local</u> <u>per ha</u>	<u>Revenue</u> <u>per ha</u>	<u>Total</u> <u>per ha</u>	<u>Total</u> <u>Income</u>
Year 4	1.75	\$ 3885	1.75	\$ 1225	\$ 5110	\$ 51100
Year 5	4.2	\$ 9324	2.8	\$ 1596	\$10920	\$109200
Year 6	11.2	\$24864	2.8	\$ 1596	\$26460	\$264600
Year 7	18.9	\$41958	2.1	\$ 1470	\$43425	\$434250
Year 8	21.6	\$47952	2.4	\$ 1680	\$49632	\$496320

SUMMARY OF COSTS AND RETURNS

<u>YEAR</u>	1	2	3	4	5	6	7	8
<u>Establishment Costs</u>								
Shelter	1243							
Drainage	16000							
Irrigation	10500	4500						
Ground Preparation		124						
Support Structure		46225						
Plants		24380						
Grassing Down				500				
Frost Protection					70000			
<u>Capital Items</u>								
Implement Shed		8000						
Tractors		7000			15000			
Roller Tiller		1700						
Fertiliser Spreader		1650						
Weed Sprayer		1000						
Pest & Disease Sprayer			10000					
Mower				3500				
Forklift				3000				
Bins				1350	1350	675	675	
Other		2500		1000				
TOTAL INVESTMENT:	27743	97079	10000	9350	86350	675	675	
<u>ANNUAL COSTS</u>								
Shelter Trimming		275	275	275	275	275	275	275
Interrow Cult.		5	5					
Fertiliser		1800	957	957	957	957	957	957
Weed, Pest & Disease	55	220	810	1288	1587	1587	1587	1587
Bees			4900	4900	4900	4900	4900	4900
Pruning		8250	5500	6800	8250	11000	13750	13750
Mowing				16	16	16	16	16
Harvesting				1680	3360	6720	10080	10080
Packing				16190	37170	154660	176970	176970
Repair & Maintenance		200	2048	2548	2991	3859	3893	3927
TOTAL ANNUAL COSTS:	55	10750	14495	34654	59506	183974	212428	212462
<u>REVENUE</u>								
Export				38850	93240	248640	419580	479520
Local				12250	15960	15960	14700	16800
TOTAL:				51100	109200	264600	434250	496320
ANNUAL SURP/DEF	-55	-10750	-14495	16446	49694	80626	221822	283858
OVERALL SURP/DEF incl. Capital & Establishment	-27798	-107829	-24495	7096	-36656	79951	221147	283858
<u>ACCUMULATED</u>								
CASH FLOW	-27798	-135627	-160122	-153026	-189682	-109731	111416	395274

SECTION 4

INCOME TAXATION

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At the time of writing, there are a number of proposed changes to taxation which will have a major impact on the taxation system in general, and the taxation of primary producers in particular. These proposals have yet to be enacted as legislation, and may ultimately differ from those originally announced.

This manual details both the current legislation and the proposed changes where applicable. These proposals are separately annotated.

While every attempt is made to ensure these writings are accurate, we must caution readers not to rely solely on the Budget Manual without further reference.

ADDENDA

The following changes, amongst others, have been made to the Tax Reform Bill (No. 2) during its passage through Select Committee and Parliament. The Bill, in its final form, was passed by Parliament on 9 December 1986, and became law on 15 December 1986.

1. All prize money from horse racing retains its status as exempt income.
2. Fertiliser is to be regarded as an operating cost for a forestry business.
3. Cost of timber for a forestry business does not include costs of land contouring and other expenditures on land improvements as detailed in part II of Appendix III.
4. The notice required to change the method of livestock valuation for tax purposes has been reduced to one year and one day.
5. The rate of write-down for high priced deer has been changed to:
Stags 20% CP
Other deer 15% CP
6. The income from the revaluation of livestock at the end of the 1987 income year is calculated as:

$$a \times (b - c)$$

where a = Smaller of 1987 closing numbers or the 1987 beginning numbers of the classes at which the year-end livestock would have been valued at the beginning of the year

b = 1987 closing livestock value

c = 1987 opening livestock value

7. Valuation of bloodstock:
Stud stallions may be written down to \$1 over a period of 5 years.
Broodmares may be written to \$1 over a period between 3 and 14 years depending on the age first used for breeding purposes.
8. As from 1987/88 income year, expenditures or losses incurred in racing bloodstock, or preparing bloodstock for racing, are not tax-deductible.
9. The maximum deduction of tree planting for farmers has been increased to \$7500 p.a. from \$2500 p.a.

10. The \$10000 loss limitation on agricultural, aquacultural and horticultural activities has been repealed as from the 1986/87 income year. The \$10000 limit on losses from property owning still applies.
11. The average market value for goats and pigs for the 1986 income year were updated. The amounts printed in Section 4.16.4 are the updated amounts.

4. INCOME TAXATION

4.1 Introduction

The law relating to income tax in New Zealand is detailed in the Income Tax Act 1976, as amended by subsequent taxation legislation and budgets. It must be appreciated that for reasons of brevity, only selected aspects of the taxation law have been included in this section, and that caution must be exercised when applying those guidelines to a particular circumstance. If in doubt, the Inland Revenue Department, your accountant, or financial adviser should be consulted.

4.2 TAXATION IN NEW ZEALAND

4.2.1 Overview

Income tax is collected throughout the income year by either the PAYE or Provisional tax systems. These monies are regarded as payments of tax for that year. After the income year has finished the taxpayer completes the appropriate annual Return of Income and files it with the Inland Revenue Department. The return is checked and the results notified to the taxpayer - for example, a refund of tax overpaid or an assessment notice requiring more tax to be paid by a specified date. A penalty of 10% is charged if this tax is not paid within one month of the specified due date, with a further 10% being added and compounded for each six month period the tax is outstanding.

Any taxpayer can object to his income tax assessment where the substance or accuracy is disputed. The requirement for objections are stipulated in the Income Tax Act and any person contemplating such action would be well advised to seek professional advice. It should be noted, however, that the lodgement of an objection does not suspend the taxpayer's obligation to pay tax.

In broad terms, where a competent objection is made to an assessment issued after 31 March 1985, one half of the tax in dispute may be deferred until the final liability is determined. Tax that is not in dispute and the other half of the disputed tax is payable by the ordinary due date. Depending upon the outcome of the objection, interest may be payable upon the deferred tax by the Commissioner or by the taxpayer.

4.2.2 PAYE (Pay As You Earn) Tax on Personal Income

The PAYE system is where source deductions of tax are made by the employer. The PAYE system applies to three types of payment:

Salary and wages - where the amount of tax depends on the amount of payment and tax code on the employee's IR 12 (Tax Code Declaration). For shearers and shedhands, PAYE tax is deducted at a flat rate of 25%

and 20% respectively. For secondary employment, PAYE tax is deducted at a flat rate of 30% (33% prior to 1 October 1986).

Extra emoluments, such as back pay or bonuses, where tax is deducted at a flat rate of 30% (33% prior to 1 October 1986).

Withholding payments, which basically refer to casual payments where there is not a strict employer-employee relationship. Common types of payment and the appropriate tax rates are specified on the back on the "employees" IR 13 (Withholding Payments Deduction Certificate) and include:

	%
Company directors' fees	35
Shearing work	15
Droving work	15
Farm work	15
Casual agricultural employees	15
Payments to suppliers of wild deer, pigs, goats (whole carcass or animal parts)	25
Honoraria	35

It should be noted that failure to provide an IR 13 to the employer will, in general, increase the rate of withholding tax deducted by 15 cents for every \$1.

The employer must pay the total tax deductions for a month to the Inland Revenue Department by the 20th of the following month. Each year the employer is required to complete the pay details on the IR 12s and/or IR 13s, and to give the yellow (bottom) copy to the employee. The top copy of the IR 12/13s, together with a completed Annual Reconciliation Form, must be sent to the Inland Revenue Department.

Every employer must keep proper records for each employee showing gross wages, tax deductions, and tax credits (if any) which relate to the family support tax credit scheme and the guaranteed minimum family income tax credit scheme.

All records relating to employee wages must be kept for 7 years.

4.2.3 Provisional Tax System

Provisional tax is levied on all income which is not taxed as PAYE income, thus ensuring as far as possible, that all income is taxed in the year in which it is earned. The following would be regarded as provisional taxpayers:

- Individuals who derive business or professional income, e.g. farmers.
- Individuals who earn more than \$1,000 from net rents, interest and/or dividends (after deducting the \$200 exemption).
- Companies.
- Trusts.

Provisional tax is paid to the Inland Revenue Department by the taxpayer, and is generally based on the income tax paid on non-PAYE income earned in the previous year. Where last year's income is considered to be inappropriate, an estimated amount may be used instead. These amounts may be adjusted (re-estimated) as the year progresses, but it should be noted that a penalty may be imposed if there is gross underestimation.

In most cases, provisional tax is payable in two instalments: one third by 7 September, and the balance due by 7 March. (These dates for payment are not appropriate where the taxpayer has a non-standard balance date. Reference should be made to Appendix I at the end of this section.)

Note: The due dates for payments of provisional and terminal tax are proposed to be 7th day of the fourth, eighth and twelfth month of the taxpayer's income year. Refer Appendix I.

The situation may arise when the first instalment of provisional tax is payable before last year's return has been completed, and therefore last year's tax is not known. If the taxpayer has not estimated his provisional tax, the first instalment of tax is based on the last completed tax return (i.e. 2 years ago). The difference between last year's tax and the provisional tax already paid is the amount due as the remaining instalments.

4.2.4 Returns of Income

In general, every taxpayer must furnish a return of income each year setting out details of the assessable income derived during the year, plus such supporting information, accounts etc. as may be required. Annual returns relate to an income year ending 31 March unless an alternative balance date has been approved.

All companies, partnerships, trusts, and persons who are in business for any part of the income year must furnish returns of all their income, irrespective of whether a profit or a loss is made. Business accounts must be supplied.

A "pay-period taxpayer" does not have to file a tax return, in which case the PAYE tax already deducted is not adjusted. If a tax return is filed, the amount of tax payable is the lesser of the PAYE tax already deducted, or the tax assessed in the tax return.

A "pay-period taxpayer" is an employee who received salary and wages less than \$11500. However, the following taxpayers are excluded from treatment as pay-period taxpayers: shearers, shearing shed hands, absentees, taxpayers eligible for the family rebate as the family support tax credit, national superannuitants who receive other income in excess of \$6006, and others who earned less than \$11,500 because of retirement, but would normally earn above this amount.

Return forms are provided by the Inland Revenue Department as follows:

- IR 3 - Individual return for self-employed and persons with (net) investment income over \$1000.
- IR 3B - Supplementary return of business income.
- IR 3F - Supplementary return of farming income.
- IR 4 - Company and club returns.
- IR 5 - Individual return for persons who receive income from salary, wages or superannuation, with or without net investment income (i.e. interest and dividends after exemptions, and net rents) of \$1000 or less.
- IR 6 - Estate or Trust return.
- IR 7 - Partnership return.

Due Dates for Annual Returns

Annual returns for IR 5 taxpayers are due 7 June each year. Annual returns for all other taxpayers are due as follows:

- Balance dates between 1 October and the following 7 June (inclusive) - return is due 7 August.
- Balance dates between 8 June and the following 30 September (inclusive) - return is due two months after balance date.

4.2.5 Assessment

The return of income requires the taxpayer to calculate his actual tax liability and then deduct the tax already paid during the income year (either as PAYE or provisional tax). The return of income (tax return) is checked by the Inland Revenue Department, who then notify the result to the taxpayer. Possible results are:

1. A refund of tax overpaid.
N.B. A provisional taxpayer may use this credit against amounts due to the IRD. or
2. More tax to pay (terminal tax), which is due in the following year.
Refer to Appendix I. or
3. No adjustment required. or
4. Confirmation of the tax loss which can be carried forward to be offset against future income.

4.3 CALCULATING TAXABLE INCOME

Taxable income is calculated in the following way:

	Income from all sources
less	Exempt Income
less	Allowable deductions
	<hr/>
=	Assessable Income
less	Special Exemptions
	<hr/>
=	TAXABLE INCOME
	=====

Income is generally accepted to mean a gain in money or money's worth derived by a person as a reward for services rendered, the profits of a business or a profit-making enterprise, or from property.

Exempt Income is income specified by the Income Tax Act to be wholly exempt from tax.

Allowable deductions are items which can be deducted from income, e.g. business-related expenditures, depreciation, past years' losses, employment-related expenditure, etc.

Special Exemptions are specified types of expenditure which may be deducted from the assessable income of individuals. (See also the taxation of "Other" Trusts in section 4.7.)

Taxable Income is therefore the residue of assessable income after deducting the taxpayer's special exemptions.

4.4 TAXATION OF INDIVIDUALS

4.4.1 Overview

Individuals are required to file IR 5 or IR 3 returns (depending on their sources of income - see section 4.2.4 Returns of Income), and to pay tax at the rates specified by the Income Tax Act. These rates vary according to the level of income on the basis that the higher the income, the higher the marginal rate of tax. The rates of tax are detailed in Appendix II.

	Taxable income is calculated as:
	Income
less	Deductions
	<hr/>
=	Assessable Income
less	Special Exemptions
	<hr/>
=	TAXABLE INCOME
	=====

Tax is calculated as:	
	Tax (on Taxable Income)
less	Rebates and Adjustments
	<hr/>
=	Tax Liability for year
less	Tax paid during year
	(PAYE/or Provisional Tax)
	<hr/>
=	FINAL ADJUSTMENT
	=====

Income, excluding exempt income, can be reduced by the deductions allowed to salary and wage earners and/or by appropriate special exemptions in order to obtain the taxable income. Tax is assessed using the appropriate rates and the allowable tax rebates deducted to obtain the actual tax liability. Tax paid during the income year is then credited to ascertain whether more tax is payable (i.e. terminal tax), a refund is due for tax overpaid, or the assessment is correct.

4.4.2 Exempt Income

The following items, amongst others, may be applicable to individuals and regarded as exempt income:

1. 50% of interest from Farm Vendor Finance Bonds or from money left in approved farms as Farm Vendor Mortgages. Such interest does not qualify for the general interest exemption. N.B. No new farm vendor finance bonds or mortgages will be approved after 8 November 1984.
2. Premiums on redemption of Inflation Adjusted Savings Bonds.
3. Up to \$500 accumulated interest from Post Office National Development Bonds and/or New Zealand Savings Certificates. This interest does not qualify for the general interest exemption.
4. Up to \$200 interest and dividends from all sources.
NB: Since 21 August 1985, dividends received from capital sources (eg capital gains, share premium reserves) are no longer exempt from income tax except on the winding of a company.
5. Any educational scholarship or bursary.
6. Prize money from horse or dog racing, or trotting.
7. Prizes from Post Office Bonus Bonds.

It should be noted that gifts, legacies, capital gains and monies derived by chance, i.e. gambling, are not regarded as income unless it can be fairly said to be the taxpayer's business.

4.4.3 Assessable Income

Includes, amongst others:

1. Profits or gains derived from any business.
2. Monetary remuneration from employment or service, such as salary and wages, benefit allowances (allowances which reimburse the employee for work related expenditure are not assessable), bonuses, gratuities, emoluments, or other monetary benefits.

NB "Salary and wages" includes:

- Value of board, lodging and house allowances received
- Payments on account of the employee
- Pensions and superannuation from past employment
- National superannuation (see below)
- Income tested benefits (prior to October 1986, only unemployment benefits received by person without dependants was taxable).
- Certain war pensions (since 1 October 1986)
- Earnings related Accident Compensation receipts.

3. National Superannuation receipts. National superannuitants will be subject to a special tax surcharge at the rate of 25% (18% from 1 October 1986) of income other than national superannuation and/or foreign social security pensions, in excess of a stated threshold. The actual amount of this threshold is determined by the rate and circumstance in which national superannuation is received, but in general terms is \$12,012 per household or \$7202 for a single superannuitant (1986/87 figures).

The amount of the tax surcharge is limited to the net amount of national superannuation payable to the taxpayer in that year.

4. Profits or gains derived from the sale or disposition of property if it is the business of the taxpayer to deal in such property, or if the property was acquired for the purpose or intention of selling or otherwise disposing of it. Property refers to all personal property as well as land.
5. Revenues from land e.g. net rents received; profits from extraction, removal or sale of minerals, timber etc.
6. Royalties and know how payments.
7. Interests, dividends, annuities and pensions.
(See also Exempt Income.)
8. Unemployment benefits received by persons without dependent children. Proposed to be "income tested benefits" as from 1 October 1986.
9. Travelling allowances received by an employee will be taxable except those amounts which represent a reimbursement of:
 - Expenditure incurred by the employee in gaining or producing his assessable income: and/or
 - Additional transport costs incurred by the employee in travelling between home and his place of work. "Additional transport costs" are defined as the excess over travel costs where these have been incurred because of the time or day which the employee works, the necessity to carry work-related equipment, the fulfilling of any statutory obligation, a temporary change in the place of work, or any other condition of work applying to that employee, or the excess costs above \$1 per day incurred because of the absence of public transport serving the place of work. Except in special circumstances, the costs incurred in travelling more than 70 km per day must be excluded from this calculation.

4.4.4 Deduction for Employment Related Expenses

Recipients of salary, wages and/or national superannuation, and casual agricultural employees, are permitted to deduct employment related expenses from this income. The allowable deduction is the greater of:

\$52 or 2% of employment income, whichever is the smaller; or

The actual amount of employment related expenditure or loss incurred in gaining assessable income. Details of the claim together with supporting evidence for payments in excess of \$20 should be included in the taxpayer's return of income. Allowable expenditures include:

- a. Union fees and subscriptions.
- b. Reference books, journals and periodicals.
(Maximum of \$50 for any one volume or issue.)
- c. Special or protective clothing.
- d. Tools of trade and equipment.
(Maximum of \$250 for any one item.)
- e. Self-education expenses where they relate to promotion; costs of attending refresher courses, conferences, or undertaking employment related research (including travel and accommodation). (Maximum of \$1,000 in any income year. The maximum cost for reference books, journals, periodicals, etc. is \$50 for any one volume or issue.)
- f. Travelling expenses incurred in the course of employment, but not between home and work. Travel expenses relating to refresher courses, conferences or research must be claimed under the clause above.
- g. Use of a private dwelling, where a room or defined area is set aside wholly or principally for employment related purposes. Allowable expenditures are limited to:
 - Repairs and maintenance of the room's interior;
 - Heating or lighting of that room;
 - Insurance on the contents of that room.
- h. Other expenditure incurred for purposes of, and as a condition of employment.

These expenses should be reduced by the amount of reimbursement received from the employer, if any, before any of the limits are applied.

4.4.5 Special Exemptions

Certain types of personal expenditures are allowed to be deducted from assessable income by way of special exemption, subject to a maximum amount. The allowable expenditures are:

1. Insurance premiums on:
 - Life insurance policies entered into prior to 9 November 1984.
 - Pension insurance.
 - Personal accident or sickness insurance.

Policies must be for the benefit of the taxpayer, spouse and/or children of the taxpayer.

2. Superannuation contributions to:
 - Approved superannuation schemes joined before 9 November 1984.
 - Employee pension schemes (whether subsidised or not).
 - Personal pension schemes.
 - Subsidised employee lump sum superannuation scheme.
 - Government Superannuation Fund.
 - Funds which provide benefits payable on personal accident, disease, sickness or expenses arising upon death.

Maximum amounts allowable are:

- Where the taxpayer is a member of the Government Superannuation fund or an employer-subsidised superannuation scheme, the special exemption is the lesser of the amounts paid, or \$1,200.
- For all other qualifying expenditures, the special exemption is the lesser of the amount paid or \$1,400.

4.4.6 Personal Tax Rebates

Rebates are deducted from the actual tax assessed, and give equal benefit to all taxpayers irrespective of their level of income. The total rebates claimed cannot exceed the assessed amount of tax payable.

The following rebates are the principal rebates available to the individual for the 1986/87 income year.

1. Personal Tax Rebate for Child Taxpayer

\$156 per year

Applies to a child taxpayer who during the income year was under 15 years old or attended a primary, secondary, or special school, and for whom a family benefit was payable in that tax year.

This rebate allows a child to effectively earn \$780 net income before becoming liable to income tax.

2. Principal Income Earner Rebate

The amount of rebate is determined by the individual's assessable income, as follows:

<u>Income</u>	<u>Rebate</u>
Up to \$6117	4.25% of assessable income.
\$ 6118 - \$12000	\$260.00
\$12001 - \$15152	8.25% of the difference between income and \$15152.
Above \$15152	Nil

Available to taxpayers other than children, spouses of principal income earners, national superannuitants, principal income earners eligible for the family rebate and spouses of such persons. It should be noted that spouse includes a de facto relationship.

Note: Rebate terminates at end of 1986/87 income year.

3. Family Rebate

The amount of rebate is determined by the total assessable income derived by the family (ie taxpayer plus other person (if any) who cares for the child).

<u>Family assessable income</u>	<u>Rebate</u>
Up to \$9800	\$962
\$19801 - 14000 over \$9800.	\$962 less 7.5% of excess
\$14001 - 20470 over \$14000.	\$647 less 10% of excess
Over \$20470	Nil

Available to families who have at least one child who is eligible for the family benefit during the income year. However, only one rebate per family is allowed and should be claimed by the principal income earner.

Note:

1. Taxpayers who are eligible for both the Principal Income Earner Rebate and the Family Rebate may only claim one of these.
2. Both the principal income earner rebate and the family rebate terminated on 1 October 1986. These rebates have been replaced by the Family Support and Guaranteed Minimum Family Income tax credit scheme, and the principal income earner transitional rebate from 1 October 1986.

4. Principal Income Earner Transitional Allowance

<u>Assessable Income</u>	<u>Rebate</u>
Up to \$ 6240	\$364
\$6241 - 9880	\$364 less 10% of excess over \$6240
Over \$9880	Nil

This rebate is not claimable if the taxpayer or spouse is entitled to the Family Support tax credit or the Guaranteed Minimum Family Income tax credit.

5. Guaranteed Minimum Family Income Tax credit.

This tax credit is in addition of the Family Support tax credit for full time employees with dependent children and net income less than \$10816 p.a.

Tax credit = \$10816 less (gross income less tax payable)

The credit is shared in two parent families.

6. Family Support Tax Credit

Those who receive the Family benefit for a child will be eligible for the Family Support tax credit from 1 October 1986.

<u>Family assessable income</u>	<u>Tax credit</u>
Under \$14000	\$1872 for one child plus \$832 for each additional child.

Over \$14000	As above, less 18% of the excess income over \$14000.
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"Assessable income" has an extended meaning for the purposes of Family Support. e.g. certain exemptions and business losses are ignored.

The tax credit is shared in two parent families.

Note: Both the Guaranteed Minimum Family Income tax credit and the Family Support tax credit are paid by:-

- (a) the employer reducing PAYE deductions
- (b) offsetting against provisional tax payments
- (c) the Department of Social Welfare if (a) or (b) do not apply.

7. Dependent Relative Rebate

The lesser of \$60 or 33% of contributions made towards the support of each dependent relative. The rebate can be claimed for a maximum of two relatives.

The rebate is not available if the relative can support his or herself (generally regarded as receiving an income of \$4,500 p.a.). Also excluded are children for whom family benefit is payable.

8. Housekeeper/Child Care Rebate

The lesser of \$310 or 33% of payments made.

This rebate is allowable for the care of a dependent child (at or away from home) provided the services are deemed necessary or a housekeeper is required because of the taxpayer's disability.

9. Donations and School Fees

The lesser of \$200 or 33% of payments made.

Donations must be for a minimum of \$5 and made to approved charities. School fees applies to fees paid for children aged under 18 at the start of the income year, and covers fees for private schools, activity fees paid to State schools, fees paid to schools for the handicapped or disabled, or fees paid to registered pre-school organisations. Receipts must be furnished in support of the rebate claimed.

10. First Home Mortgage Interest Rebate

The lesser of \$1,000 or 31% of mortgage interest paid.

The rebate will be allowable for the first five years of ownership by owner-occupiers who have purchased their first home prior to 9 November 1984.

11. Home, Farm and Fishing Vessel Ownership Savings

45 cents for every dollar saved during the year in special home/farm/fishing vessel ownership accounts.

Maximum rebates per year are:

Home account:	\$1,350 (\$3,000 savings)
Farm account:	\$2,250 (\$5,000 savings)
Fishing vessel account:	\$2,250 (\$5,000 savings)

Maximum savings in any one account are:

Home account:	\$10,250
Farm account:	\$60,000
Fishing vessel account:	\$60,000

If savings are withdrawn and used for purposes other than that specified, the tax rebate must be repaid. This effectively imposes a withdrawal tax of 45% under these circumstances.

Note: Home ownership accounts were abolished from 1 August 1986. Existing accounts at that date continue to qualify for the rebate.

12. Visitors from Overseas who work for part of the income year in New Zealand are allowed a proportion (based on time worked here) of the following rebates:

Child taxpayers
Dependent relative
Housekeeper

It should be noted that the Principal Income Earner and Family Rebate entitlements are, however, determined by reference to the equivalent annual income which would have been earned if the taxpayer worked for a full year.

Example

Note: Detail of how the Family Support Tax credit scheme will be incorporated into the tax return had not been announced at the time of writing. The following represents the author's suggestion only.

A married man with 2 children aged 4 and 6 derived the following income during the year ended 31 March 1987.

Salary	\$18,600
Mortgage interest	260
Savings Bank interest	220
Dividends received	300

His wife earned \$600 in the same year.

Throughout the year he paid the following amounts:

Life assurance premiums (since 1980)	\$ 730
Superannuation (subsidised scheme)	540
Donations to Red Cross	30
Activity fees to school	70
Rates on own home	152
Interest on mortgage over 1st home (Since 1983)	2,800

Tax deductions from his salary as per his IR 12 were \$2000 after deducting total Family Support tax credit of \$1500.

His income tax assessment would be as follows:

Salary	\$18,600
less Standard Deduction	52
	<u>\$18,548</u>

Mortgage interest	260	
Savings Bank Interest	220	
Dividends	300	
	<u>780</u>	
less exemption	<u>200</u>	
TOTAL ASSESSABLE INCOME		<u>580</u> 19,128
less Special Exemptions:		
Life assurance premiums	730	
Superannuation contributions	540	
	\$ 1,270	
	=====	
Special exemption allowable		1,200
TAXABLE INCOME		<u>\$17,928</u> =====
INCOME TAX on \$17,928		\$ 4,544.82
less REBATES and ADJUSTMENTS		
Family Rebate		
\$647 - 10% of (19728 - 14000)	74.20	
Family support tax credit		
(\$1872 + 832) - 18% of		
(19728 - 14000)		
i.e. 2704.00 - 1031.04		
= \$1672.96		
Credit for husband	836.48	
Donations and School Fees		
Lesser of \$200 or 33% of \$100	33.00	
First Home Mortgage Interest		
Lesser - \$1000 or 31% \$2800	868.00	
Total rebates and adjustments	<u> </u>	<u>1811.68</u>
Tax Payable	<u>2733.14</u>	
Refund due	= Tax payable - PAYE deductions (net) = \$2733.14 - (2000.00 + 750.00) = \$ 16.86 =====	

4.5 TAXATION OF COMPANIES

A limited liability company pays tax in its own right (i.e. it is separate and distinct from its shareholders), and the basic rate of tax on income derived by New Zealand resident companies is 48%. The basic rate for non-resident companies is 53% from 1 April 1986). Taxable income generally means business profits (in the normal accounting sense), less any taxation incentives applicable to that company. Dividends received by a company are generally regarded as exempt income, and companies are not entitled to tax rebates or special exemptions.

Companies are provisional taxpayers. (For further details refer to section 4.2.3 - The Provisional Tax System, and Appendix I - Dates for payment of provisional and terminal tax.)

The IR 4 Company Return of Income is usually due by 7 September following the company balance date, although if the company balances between 8 June and the following 30 September (inclusive), the return is due two months after balance date. Returns must be filed, including accounts, irrespective of whether a profit or loss is disclosed for the year.

Losses can be carried forward and deducted from the first available assessable incomes until extinguished provided 40% of the shareholding in the loss company remains constant through the period of loss to eventual offset. This requirement is relaxed in the case of public companies listed on the Stock Exchange but not where one person or group of "associated" persons acquires more than 10% of the shareholding.

Special considerations apply where relatives (i.e. associated persons) of the shareholders or directors receive remuneration from the company. These may affect arrangements to split income between family members, and it would be advisable to seek professional advice under these circumstances.

Commencing with the 1986-87 income year benefits provided to shareholders in a private company will be treated as follows:

Minor shareholder (less than 10% interest):

- Costs are
 - tax-deductible to the company
 - liable to fringe benefit tax
 - not regarded as a dividend in the hands of the recipient.

Major shareholders (at least 10% interest):

- Costs are
 - not tax-deductible to the company
 - not liable to fringe benefit tax
 - regarded as a dividend in the hands of the recipient.

4.6 TAXATION OF PARTNERSHIPS

4.6.1 Overview

A partnership is not a taxpaying entity and is not itself liable to pay tax. However, the partners must file a separate "partnership" return of income (IR 7) covering their joint income (irrespective of profit or loss) and detailing the distribution amongst the various partners. The partnership accounts or the supplementary return forms IR 3B or IR 3F should also be furnished.

Each partner is liable for tax as an individual and must add their share of the net partnership income to their income from other sources. Income from a partnership does preserve its identity in the hands of the recipient partners as interest and dividends (up to \$200 exempt), and ordinary assessable income. (Refer to section 4.4 Taxation of Individuals). Partnership losses should always be allocated to the constituent partners and cannot be carried forward by the partnership itself.

Payments of salary or wages and bonus payments made to a working partner under a written contract of service will be tax-deductible to the partnership. Normal PAYE procedures will apply to these payments.

4.6.2 Family Partnerships

The use of family partnerships, often including trusts for infants, has long been a common device for splitting income among family members, thereby avoiding the high tax brackets. To counteract loss of revenue through this type of income splitting, the Income Tax Act lays down five requirements before a family partnership is deemed to be acceptable for taxation purposes:

- There must be a contract of partnership in writing or by deed by deed signed by all parties;
- No partner can be under 20 years of age when the agreement is signed;
- The agreement must bind the partners for at least three years;
- Each partner must have real and effective control of their remuneration; and
- No part of the income payable to a "relative" would be regarded as a gift and thereby subject to Gift Duty. In determining whether a gift exists, consideration would be given to the following factors, amongst others:

- The nature and amount of the capital contributions or the value of the services performed.
- The proportions of such contributions to the remuneration or share of profit between partners.
- Whether the arrangement would be acceptable under normal commercial standards; etc.

Where the above five requirements are not satisfied and the Commissioner of Inland Revenue believes that the remuneration or share of profits paid to the relative is excessive, he has the power to reallocate the partnership income for taxation purposes between the partners in such shares as he considers reasonable, having regard to the capital and services contributed by the partners and other relevant matters.

It should be noted that it is no longer necessary for a husband and wife to have a written partnership agreement if they are in business together, but it is still necessary to have an agreement if the parties are not sharing everything on an equal basis.

4.7 TAXATION OF TRUSTS

A trust is an equitable obligation binding on a person (who is called a trustee) to deal with property over which he has control (which is called the trust property), for the benefit of persons (who are called the beneficiaries) of whom he may himself be one, and any one of whom may enforce the obligation.

It is not necessary that a trust be in writing, as a valid trust can be created by an oral agreement or by the conduct of the parties concerned. It must be emphasised, however, that it is desirable to evidence a trust in writing by a Deed of Trust, or inclusion in a will, or by some other trust instrument.

4.7.1 Classification of Trusts

The Income Tax Act distinguishes between two types of trust:

Specified Trusts

Generally speaking, these are trusts created during the lifetime of the settlor (i.e. an inter vivos trust) on or after 19 July 1968; and

Other Trusts.

Trusts other than specified trusts.

4.7.2 Liability for Income Tax

A trust is a separate legal entity, and as such all the income of a trust is liable for income tax in the hands of the trustee, either as "Trustees' Income" or as "Beneficiaries' Income" where the trustee acts as the agent of the beneficiary although the primary liability remains with the beneficiary.

In the case of "Beneficiaries' Income" (see section 4.7.3 below), the taxation liability is determined by providing for the special exemptions and rebates which the beneficiary himself is eligible for. Obviously, if the beneficiary derives additional income a personal return of income should be filed incorporating his trust income and the tax already paid by the trustee on his behalf.

"Trustees' Income" is any income other than Beneficiaries' Income and the trustee is assessed for tax on the following basis: **Specified Trusts** are taxed at 35 cents per dollar of taxable income or at the basic rates applicable to individuals, whichever is the greater. No special exemptions are granted. **Other Trusts** are taxed at the basic rates applicable to individuals after deducting a special exemption of \$100.

Tax on the income of a trust will normally be paid on a provisional basis, the return of income for the trust (IR 6) being filed by the trustee(s). Trust income is taxed once only so that a distribution to a beneficiary is not taxed if the trustee has paid tax on the income previously.

4.7.3 Classification of Income

Income derived by a trustee during an income year is classified as Beneficiaries Income for the same year under any of the following conditions:

- Where an adult beneficiary of any trust is entitled to income under a specific provision of the trust deed or by the discretionary act of the trustee; or
- Where an under-age beneficiary of an 'other' trust is entitled to income under a specific provision of the trust; or
- Where the trustee pays or applies income to or on behalf of the beneficiary of a trust during or within six months after the income year by a genuine transaction which places the income beyond the possession and control of the trustee in his capacity as trustee of that trust, provided that if the beneficiary of a specified trust is under-age, the income must remain out of the trust or any business in which the trust is interested whilst the beneficiary is under-age.

Any other income not coming within the above is then Trustees' Income.

It should be noted that the test for Beneficiaries' Income stresses the physical parting of possession and/or control over the funds.

4.8 FARMERS

4.8.1 Liability for Income Tax

All farmers are liable for income tax as provisional taxpayers. The appropriate return form depends on the entity involved:

- | | |
|-------------|---|
| Individual | - IR 3 plus either completed accounts or the supplementary return from IR 3F. |
| Company | - IR 4 plus accounts. |
| Trust | - IR 6 plus accounts. |
| Partnership | - IR 7 plus accounts. Each partner must also file an IR 3 return. |

Generally, provisional tax is paid in two instalments (for payment dates see Appendix I), although a farmer may pay in three equal instalments, the last days for payment being 7 September, 7 March and 7 June, in that order, provided all the following conditions are met:

- Balance date is between 1 April and 30 September (inclusive);
- More than half of the assessable income regularly comes from farming or an agricultural business; and
- Half or more of the gross cash income is regularly received after 7 February.

Note: For proposed changes to the provisional tax system, refer Section 4.2.3 and Appendix I.

The department accepts that any of the following are carrying on their activities for farming or agricultural purposes:

- Livestock farmers (e.g. sheep, cattle, deer, pigs, goats, horses).
- Dairy farmers including sharemilkers.
- Grain and seed growers.
- Apiarists.
- Poultry farmers.
- Orchardists.
- Horticulturists (e.g. market gardeners, tomato growers, berryfruit growers, flower growers).
- Viticulturists.

The Department does not regard dealing in farming stock as an agricultural or farming business.

4.8.2 Farm Income

The assessable income of a farmer will include the following:

- Business profits from trading operations - i.e. the generally accepted accounting definition of profit.

being SALES
less PURCHASES,
plus or minus CHANGES IN VALUE OF STOCK ON HAND at
the end of the year (increases are added, decreases are subtracted).
(For valuation of stock, see section 4.8.4. See also the proposed
changes announced in the Economic Package for Farmer, section
4.15)

- The value of meat and produce consumed domestically. (Usually nominal value if grown/raised on the farm).
- Income from contracting.
- Rents received from leasing farm property, including grazing fees.
- Receipts from the hire of livestock and plant, including stud fees.
- Insurance proceeds in respect of the loss of crops or stock.
- Prize money from A & P shows, less entrance fees and other related expenses.
- Compensation for stock condemned.
- Refunds from Income Equalisation scheme.
- Decreases in the number of livestock held at Nil Value (see section 4.8.4 Valuation of Livestock and the proposed change Section 4.15).
- Income from the sale of timber, including standing timber and trees planted for agricultural purposes, is assessable but may be spread over the year of sale and up to 3 preceding years. (The previous provisions allowed farmers to spread income over the year of sale and up to 4 succeeding years). (See also Section 4.8.10)
- Income from dealings on the "futures" market, e.g. wool futures.

4.8.3 Farm Expenses

Private expenses in the nature of household stores, domestic wages, repairs to household equipment etc. are to be treated as private drawings, and must not be charged against farm income. Similarly, the private portion of domestic expenses, electricity and car depreciation should also be regarded as drawings.

In addition to the appropriate business expenses, farm expenses will include the following:

- Legal expenses incurred in arranging finance for the purchase of, or in arranging for the lease or renewal of a lease of, income producing assets.
- Legal expenses incurred in borrowing or renewing loan moneys employed as capital in the production of assessable income.
- Telephone (excluding personal toll calls).
- Proportion of car expenses (including depreciation) applicable to business use, on the basis of the ratio of business usage to total usage. This entails the keeping of detailed records in an appropriate log book. Where insufficient records are kept, the maximum deduction allowable is limited to 25% of the possible deduction.
- Stores and rations provided to employees.
 - Supplied to an outside employee (including a partner with less than 20% interest): the farmer can claim the actual cost if accurate records are kept, otherwise the deduction is limited to \$10 per employee per week. This applies where these costs have not already been claimed as a tax deductible farm expense.
 - Supplied to related married employees or part proprietor employees: the actual cost of stores and rations supplied is tax deductible.
- Accommodation supplied to employees.
 - Supplied to all employees except a partner-manager: depreciation at appropriate rate(s) and all expenses (e.g. mortgage interest, repairs, maintenance, etc.) are deductible in full.
 - Supplied to a partner/manager: the partnership can claim 25% of the costs of the dwelling (refer paragraph below).
- Depreciation - see section 4.8.5 below.
- One quarter of total expenditure on the farm dwelling if situated on the farm - e.g. repairs and maintenance, depreciation, domestic power etc.
- Repairs and Maintenance costs on sheep yards, sheep dips and fencing. Depreciation may NOT be claimed on these assets, but the outlay costs on these items are usually claimed as development expenditure.

- Cost of papers and magazines containing farming information.
- Wages paid to wife.
 - Payments for cooking duties in respect of permanent employees (including adult members of the farmer's family employed full-time) will be allowed on the basis of:
 - 1 permanent employee - \$18 per week.
 - 2 permanent employees - \$27 per week
 - 3 permanent employees - \$33 per week
 - and thereafter an additional \$4.50 per employee per week.

It is necessary that the requirements for the payment of wages from husband to wife are met i.e. declaration that the wages are genuine services, IR 12 completed, regular cash payments, tax and Accident Compensation levy deducted and accounted for.

This payment is in addition to any special arrangements made in respect of seasonal or part-time employees, e.g. shearers.

- Payments for work performed on, or on behalf of, the farm may be deductible if the Commissioner of Inland Revenue has given his prior consent to such payments. Before consent is granted, the Commissioner must be satisfied that the payment is for genuine services rendered in producing assessable income for the year.

An application for approval must contain certain details (the Inland Revenue Department provides appropriate declaration forms), but subsequent to approval only written confirmation that wages are still being paid on the agreed basis is required. The declaration should be filed before (or at least as soon as possible after) the wife's employment commences.

- Cost of transporting employees' children to school. The cost of transporting the farmer's own children is regarded as private and therefore not deductible.
- Accident Compensation Levy
All persons who suffer injury by accident in New Zealand (and in certain cases, outside New Zealand) and who are employees or self-employed at the time of the accident, have cover under the Earners' Scheme of the Accident Compensation Act.

The scheme is funded by a levy paid by employers and self-employed persons. These levies are a tax-deductible expense.

LEVIES ON EMPLOYERS

Every employer, whether an individual, a partnership, trust, company or club, must pay an annual levy by 30 June each year, based on the amount of leviable earnings paid to employees during the year ended 31 March. Levy rates vary according to the industrial activity of the employer.

For example:

<u>Industrial Activity</u>	<u>Class No.</u>	<u>Levy per \$100</u>
Agricultural Contracting (Fencing, sheep dipping, spraying, harvesting, haymaking, baling, hedge cutting)	104	1.60
Agricultural Contracting (Scrub cutting, grubbing, burning, stumping and clearing)	124	3.20
Shearing	105	1.30
Cereal growing	101	0.85
Drainage or Sewer System	104	1.60
Construction on agricultural land		
Non-mechanised	104	1.60
Mechanised	507	1.30
Eel farming	130	0.55
Fence-erecting and repairing	104	1.60
General farming	100	1.30
Fish farming	130	0.55
Hop growing	101	0.85
Market gardening	101	0.85
Orchards - including berry fruit	101	0.85
Poultry farming	101	0.85

Spraying - agricultural excluding aircraft	104	1.60
Stock buying	831	0.35
Tobacco growing	101	0.85
Aerial work - fixed wing aircraft	702	6.55
- helicopters	703	9.25

LEVIES ON THE SELF-EMPLOYED

Generally, owner-operators, partnerships and sharemilkers are all regarded as self-employed for accident compensation purposes. The levy payable is 1.0% of the year's taxable farm (business) income, with a maximum levy of \$473.20 and a minimum levy of \$104. If his leviable earnings are less than \$16,172 he may elect to join the optional levy scheme in which case his minimum levy will be \$161.72 (based on 1.0% of assumed earnings of \$16,172). The minimum levy for a part-time self-employed person is \$26.00. Further considerations apply where dual earnings are received (i.e. a person is both self-employed and also receives wages). This levy must be paid by 7 March each year.

The above is a general introduction only, and queries regarding levies should be directed to the Inland Revenue Department. Queries regarding compensation claims should be directed to the State Insurance offices except in Dunedin where queries should be directed to the Accident Compensation Commission itself.

- Costs of planting and growing timber which have been incurred since 9 November 1984 are fully tax-deductible. These costs include the costs of planting the trees, and depreciation on plant and machinery used in the forestry operation. Development expenditures may also be claimed - see section 4.8.7.
- Various incentives, income levelling schemes etc (see below).

4.8.4 Valuation of Trading Stock

1. General Principles

Trading stock includes anything produced or manufactured; anything acquired or purchased for purposes of manufacture, sale or exchange; livestock; but excludes land.

In the case of any business owned or carried on by the taxpayer, the value of the trading stock at the beginning and at the end of every income year

must be detailed in the taxpayer's accounts (or tax return). The value on hand at the end of the year is included in assessable income; the value on hand at the beginning of the year is deducted from assessable income.

In general, the taxpayer has the option of valuing his trading stock at:

- Cost price; or
- Market selling value; or
- Replacement price.

However, the Commissioner of Inland Revenue may approve a lower valuation for trading stock other than livestock where obsolescence or other special considerations materially affect its value.

2. Consumable Aids

Items consumed in the production of trading stock but which do not form part of the final product are regarded as consumable aids and not as trading stock. Therefore, expenditure on items such as fuel, farm chemicals, fertiliser held for spreading and hay held for winter use would be fully deductible in the year the expenditure is incurred, even although some unconsumed stocks may be held at the end of the year.

3. Growing Crops, Fruit and Vegetables

Crops, fruit and vegetables, standing timber and other products which grow from the land and are attached to the land are regarded as part of the land itself, i.e. a capital asset. Growing crops are not regarded as trading stock unless and until they are harvested or severed from the land.

4. Valuation of Livestock

NOTE: Proposed changes to the tax legislation will radically change the valuation of livestock. Details are contained in section 4.15.

Livestock is regarded as ordinary trading stock and the taxpayer has the following options:

1. Cost price, market selling value, or replacement price.
2. Standard Value.

A "standard value" is the value selected by the farmer and approved by the Inland Revenue Department, for each particular class of livestock. This value is maintained over time, irrespective of actual cost or subsequent market value. Generally the market value will greatly exceed standard value, but the farmer does not have to revalue or adopt market value where he continues his farming operation.

Standard values may be altered with the approval of the Commissioner. In practice, prior approval is not necessary when

standard values are increased to amounts less than current market values.

However, it is desirable to attach a note to the accounts drawing attention to and reasons for the change.

It should be noted that the Inland Revenue Department has now established minimum standard values as follows:

Sheep,			\$ 6
Cattle,	beef	- rising one year	\$ 80
		- others	\$150
	dairy	- rising one year	\$ 60
		- others	\$110
Deer	- red, wapiti, elk, cross bred		
		- male	\$200
		- female	\$800
	- other breeds		
		- male	\$ 90
		- female	\$200
Goats	- Angora		
	- Purebred	- male	\$200
		- female	\$500
	- G1	- male	\$ 60
		- female	\$200
	- G2, G3, G4	- male	\$ 10
		- female	\$ 60
	- Milking female		\$ 50
	- Cashmere female		\$ 20
	- Other goats		\$ 10
Pigs	- Sows		\$ 40
	- Boars		\$ 40
	- Others		\$ 20

These values apply to persons who commenced farming on or after 1 December 1985. It is proposed to review these standard values on a regular basis.

It should be noted that a farmer is not bound to adopt standard values: there is no reason why he cannot use either cost, market value, or replacement value for his livestock until such time as he elects to adopt standard values. There are, however, significant tax concessions in using standard values.

Standard values are not available to dealers in livestock or for high priced stud stock (which should be valued at purchase price, with annual revaluations downwards over its useful life).

In addition:

- New farmers, and existing farmers who develop or purchase additional land, will be required to write down the value of new or additional (i.e. excluding replacement) livestock purchased in that year or the subsequent 3 years from cost price to standard value in instalments over a period of 3 years. The legislation envisages equal instalments, but does allow some variation.

Prior to the 1983 income year, the farmer could adopt standard value(s), but maintain cost price (or market or replacement value) for up to three years and then write down to standard value over no more than three further years.

- Reliefs are available by allowing the spreading of resultant large incomes either forward or backward over three years in the event of a sale occasioned by death, retirement, adverse events, expiry of lease etc.

Farmers who are forced to sell livestock because of an adverse event have the option of offsetting the income from the sale against replacement livestock or against the cost of certain capital asset purchased on or after 8 May 1985. The capital assets which qualify are:

- Farming or agricultural plant and machinery
(offset treated as depreciation)
 - Fodder storage buildings
(offset is assessable if asset sold within 5 years of acquisition)
 - Horticultural root stock.
- For income tax purposes, livestock may be transferred to children who are at least 18 years old and who use those stock in a farming operation, at a reasonable standard value, i.e. not unduly low. (This transaction is regarded as a sale for income tax purposes). A number of values may be used, but the most likely

is the minimum standard values acceptable to IRD. Note, however, that if gift duty is payable it is assessed on market value less consideration paid (if any). It should be noted that transfers of livestock from one spouse to another under a matrimonial agreement would generally not be a "gift". Refer to Section 4.12.

Note: This provision will not be available under the proposed new tax regime for farmers.

3. Nil Value Scheme.

Note: Nil values will not be available under the proposed new tax regime for farmers.

The nil value scheme is an incentive scheme aimed at deferring the tax liability on increases in certain livestock numbers over a basic number until the stock is sold or otherwise disposed of, or revalued. The scheme is optional and applies to any taxpayer carrying on a farming business on land in New Zealand. Investors are not eligible for the scheme.

Main features of the scheme are as follows:

- Applies only to cattle, sheep, pigs, deer and goats.
- The "basic number" of the herd or flock is the greatest number of a particular class of stock held in the four income years prior to the year when the farmer elects to join the scheme. (Prior to the 1983 income year, the period for determining basic livestock numbers was two years.)
- At the end of each income year, all or part of the excess over the basic number in respect of each class may be valued at nil.
- Any decrease in livestock numbers below the basic number of one class can be offset against any increase over the basic number in the other classes on the basis of "specified equivalents".

Where 1 head of cattle is equivalent to 6 sheep or 6 goats or 4 pigs or 4 deer.

All categories within each class of livestock are regarded as equal, e.g. ewes, lambs, wethers etc. All have the same equivalent rating.

- The Commissioner has power to make an equitable adjustment where there is a change in the basic nature of the farming operation, or an adverse event affects the farm, or other special circumstance.

Example:

A sheep and cattle farmer with a balance date of 30 June, elects to join the scheme at 1 July 1982. His year of first election is therefore the year ended 30 June 1983.

His basic number is calculated as follows:

		Stock on Hand		
	<u>30/6/79</u>	<u>30/6/80</u>	<u>30/6/81</u>	<u>30/6/82</u>
Sheep	3,100	4,000	3,905	3,975
Cattle	160	140	151	148

His basic number is the greatest of the numbers for each class of livestock.

i.e. Sheep 4,000 at \$ 5 Std. Value
 Cattle 160 at \$50 Std. Value

Year Ended 30/6/83

Closing Stock: Sheep 4,300, Cattle 160

Valued as:

Sheep	-	basic number at s.v.	4,000 at \$5
		increase over basic number	300 at Nil
Cattle	-	basic number at s.v.	160 at \$50

Year Ended 30/6/84

Closing Stock: Sheep 4,500, Cattle 120

The decrease in cattle below the basic number in this year will necessitate a reduction to the 'increase' in sheep numbers closing stock, the reduction being made at the specified equivalent of 1 head of cattle = 6 sheep.

Sheep numbers	4,500
less decrease in cattle at specified equivalent	
40 cattle x 6	<u>240</u> Valued at s.v.
	4,260
less basic number	<u>4,000</u> Valued at s.v.
Net Increase over basic number	<u>260</u> Valued at Nil
Valued as:	
Sheep - number at s.v.	4,240 at \$ 5
increase over basic no.	260 at Nil
Cattle - number at s.v.	120 at \$50

Year Ended 30/6/85

Closing Stock: Sheep 5,000, Cattle 240

Valued as:

Sheep	- basic number at s.v.	4,000 at \$ 5
	increase over basic no.	1,000 at Nil
Cattle	- basic number at s.v.	160 at \$50
	increase over basic no.	80 at Nil

If the farmer wished to value part of the increase over basic number at nil value, the number valued at standard value is the basic number plus the additional stock not valued at nil. The basic number, however, is not altered.

4.8.5 Depreciation

Depreciation is an allowance for loss in value of a fixed asset due to fair wear and tear, obsolescence, etc. Not all assets are depreciable - for example, assets which are not used to produce assessable income, or assets which are not subject to wear and tear (such as land), and under no circumstances can depreciation extend beyond cost. Where an asset has a part business and part private use, depreciation is calculated at the schedule rate and then apportioned between business and private (e.g. car depreciation).

There are two basic types of depreciation:

1. FIRST YEAR DEPRECIATION ALLOWANCES

A single first year allowance will be deductible in the year in which certain assets are first used in the production of assessable income, and include:

New or used farming plant and machinery	25%
New farm buildings, extensions and capital alterations (not dwellings)	20%
Employee accommodation	20%

Note: First year depreciation allowances for farming will terminate at the end of the 1988 income year.

2. ORDINARY DEPRECIATION ALLOWANCES

In the second and subsequent years, ordinary depreciation will be allowed as a deduction from assessable income provided adequate records are maintained. Depreciation is usually calculated as a fixed percentage of either the cost price of the asset (CP method) or the diminishing book value (DV method), and the Inland Revenue Department specifies both the rate and method of depreciation. These schedule rates are the maximum allowable for income tax purposes, although a lesser rate may be claimed if desired.

Selected examples of Schedule Rates of Ordinary Depreciation:

ITEM	%	
Barns - loafing and wintering	10	CP
Bridges - wooden	2.5	CP
- other	2	CP
Buildings - reinforced concrete	1	CP
- brick, stone, concrete	2	CP
- wooden	2.5	CP
• - "temporary buildings"	10	DV
Chainsaws	50	DV
Crates - sheep and cattle	15	DV

Dams and Reservoirs - reinforced concrete	1	CP
- other		Maintenance
Dips - shower type	10	DV
Effluent disposal units on farms	10	DV
		or Development
Electric Fences	10	DV
Ensilage Pits - concrete walls with sliding roof	10	DV
Feeding out units for cattle	4	CP
Freezers - for dog meat	10	DV
Glasshouses - wooden framed	5	CP
- metal framed	3	CP
- P.V.C. Tunnel House	7.5	CP
		& Maintenance
Irrigation plant	10	DV
		or Development
Milking Sheds - built before 1/4/66	4	CP
- built after 1/4/66	10	CP
- conversion to herringbone	10	CP
- herringbone or rotary	10	CP
Motor Vehicles, trucks, bikes and scooters	20	DV
Pig Houses - all type	10	CP
Plant and machinery - motorised	20	DV
- non-motorised	10	DV
Poultry - Battery type cages	10	DV
- Colony houses with wooden frames,		
iron roofs and netting sides and bases	10	DV
- Fowl Houses Steel framed	2.5	CP
Wooden framed	5	CP
Silos - erected on farm	10	DV
Slaughterhouses on farms - concrete	5	CP
- timber and concrete	6	CP
- timber	10	CP
Tractor Safety Frame purchased before July 31 1986	100	CP
Trailers		At the rate of the towing vehicle

Depreciation of Cars

For tax purposes, the depreciable cost of motorcars and stationwagons (excluding utility vehicles, e.g. landrover, and vehicles of a "specialised nature", e.g. hearse) has been based on:

Actual cost	if purchased after 1987 income year
\$11000	if purchased during 1982-1987 income years
\$ 8000	if purchased 1979-1981 income years
\$ 7000	if purchased 1978 income year
\$ 6000	if purchased after 22/10/74 but before the 1978 income year
Actual cost	if purchased before 23/10/74

Costs in excess of these specified amounts could not be taken into account when calculating depreciation.

As at 1 April 1987, the book value of cars owned by the taxpayer may be revalued for depreciation purposes according to the following formula:

$$\frac{\text{Actual cost}}{\text{Specified cost}} \times \text{book value based on specified cost}$$

Depreciation will then be calculated on this revised book value.

e.g. Car purchased for \$18500 November 1984.
Specified cost \$11000
Depreciation allowable to 31/3/86 \$4664.

$$\begin{aligned} \text{Revised Book value} &= \frac{18500}{11000} \times (11000 - 4664) \\ &= \underline{\$10656} \end{aligned}$$

Beekkeepers

The cost of frames for supers and hives of a new apiarist or for additional supers and hives of an established apiarist is capital expenditure and not deductible. Ordinary depreciation is not allowable, but first year depreciation may be claimed. However, the full cost of repairs and the cost of replacement frames is a tax-deductible expense.

Assets Acquired During the Income Year

If first year depreciation is not claimed, then ordinary depreciation may be claimed as follows:

BUILDINGS - Depreciation is allowable on the cost of the building only (excluding land) for each whole or part month used.

OTHER ASSETS - A full year's depreciation is allowable if the asset was used for more than 6 months of the year or more than half a season if used for seasonal work; otherwise half of the year's depreciation is allowable.

Assets Sold During the Income Year

AT A LOSS (i.e. sales price is less than book value)

Buildings: Any loss on sale is not tax deductible. However, if no depreciation has been previously claimed, then accumulated depreciation at schedule rates can be claimed in the year of sale.

Other Assets: Any loss on sale is deductible in the year of sale. If no depreciation has been previously claimed, the total loss (i.e. cost less sales price) can be claimed when the asset is sold.

AT A PROFIT (i.e. sales price exceeds book value).

Buildings: Ordinary depreciation recovered is not assessable, but if owned for less than 10 years, any write-back for tax purposes is merely to the extent that the disposal proceeds over and above book value represents a recovery of special, additional, or first year depreciation.

Other Assets: Any depreciation recovered is assessable in the year of sale, although it can be used to offset (i.e. reduce) the depreciable cost of a replacement asset. If the depreciation recovered exceeds \$1,000, the taxpayer may elect to spread the amount recovered over the year of sale and up to three years back.

It should also be remembered that any excess of disposal proceeds above cost price represents a capital gain which is not taxable.

4.8.6 Farming Investment Allowance (Terminated 31 March 1985)

20% of the cost of new plant and machinery used for farming or agricultural purposes was deducted from assessable income in the year the asset was first used.

The allowance was not available for cars, office equipment or any asset which was secondhand, costs less than \$500, had been claimed as development expenditure or where another investment allowance had been claimed for that asset.

The allowance did not affect first year or ordinary depreciation, and was in addition to depreciation claims. This meant that 120% of cost could be written off over the working life of the asset.

4.8.7 Expenditure on Land Improvements Development Expenditure

(Note: Refer to Section 4.15 for proposed changes)

Certain expenditures incurred during an income year which normally would be regarded as capital expenditures and therefore not deductible, may be treated as a tax-deductible expense.

Such expenditure may be deferred in whole or in part and claimed at the written election of the taxpayer in the year of expenditure and over not more than nine succeeding years. The types of expenditure which qualify are:

Any expenditure incurred in any income year in:

- The eradication or extermination of animal or vegetable pests on the land;
- The felling, clearing, destruction, and removal of timber, stumps, scrub, or undergrowth on the land;
- The destruction of weeds or plants detrimental to the land;

- The preparation of the land for farming or agriculture including the cultivation and grassing thereof, but excluding items specified below.

Any expenditure incurred on or before 31 March 1987 in:

- The draining of swamp or low-lying lands;
- The construction of access roads or tracks to or on the land;
- The construction of dams, stopbanks, irrigation or stream diversion channels, or other improvements for the purpose of conveying water for use on the land or for preventing or combating soil erosion;
- The repair of flood or erosion damage;
- The sinking of bores or wells for the purpose of supplying water for use on the land;
- The construction of aeroplane landing strips to facilitate aerial topdressing of the land;
- The construction on the land of fences, including the purchase of wire netting for the purpose of making new or existing fences rabbit proof;
- The erection on the land of electric power lines or telephone lines;
- The construction on the land of feeding platforms, feeding yards, plunge sheep dips, or self-feeding ensilage pits;
- The construction on the land of supporting frames for growing crops;
- The construction of earthworks, ponds, settling tanks, or other similar improvements primarily for the purpose of the treatment of waste products in order to prevent or combat pollution of the environment.

Such expenditure incurred after the above terminating date may be regarded as development expenditure provided the necessary steps have been taken before that date to enter into a binding contract involving substantial expenditure as part of a development plan which has been approved by the Commissioner of Inland Revenue.

Where the taxpayer ceases to carry on business before the total amount is deducted, the taxpayer has the option of:

- deducting the balance remaining in the year he ceased business, or
- reapportioning the amount over the year incurred, and the other years in which he carried on the farming business.

As from 9 November 1984, expenditures incurred in developing the land for timber production will be tax deductible in a manner similar to that provided for farm development expenditure. This measure was introduced in the 1984 Budget to replace the Forestry Encouragement Grants scheme which was abolished with effect from the above date.

Note: Storm and flood damage caused by a storm in July 1985 was declared an adverse event for the farmers affected. It is proposed to provide these farmers with the option of claiming restoration expenditure

incurred up to the end of the 1988 income year as a tax-deduction in the 1985 income year rather than the year such expenditure occurred. This would require reassessment of the 1985 income tax if such an option is exercised.

Fertiliser and Lime

Expenditure on the purchase and application of fertiliser and/or lime may be deferred in whole or in part, and claimed at the written election of the taxpayer in the year of expenditure and over not more than four succeeding years.

Tree Planting

Expenditure on planting or maintaining trees which have been planted to provide shelter or to prevent erosion or otherwise for agricultural or pastoral purposes, or in erecting or maintaining fences to protect any such trees, is tax-deductible in the year the expenditure is incurred. This deduction is not to be allowed in relation to expenditure for which the farmer receives a Forestry Encouragement Grant.

4.8.8 Recovery of Development Expenditure and Interest

Note: Refer to Section 4.15 for proposed changes

When farm land or a marine lease/licence is sold at a profit within 10 income years of acquisition, any development expenditure and/or interest on money borrowed for purchase or development purposes which was previously allowed as a tax deduction can be recovered.

The amount regarded as assessable income is the lesser of the profit made or the tax deductions allowed for development and interest. This amount is assessable in the year of sale or it may be spread over the year of sale and up to 4 years back.

This provision does not apply to a sale where, within 12 months, the taxpayer purchases a replacement farm which is owned until 10 years have elapsed since the original farm was acquired (i.e. the sale of a "stepping stone" farm); land sold under a compulsory acquisition order; disposal upon death of the owner; certain disposals by a spouse who inherits the farm; disposals under a Court order; and certain disposals where the profit on sale would already be regarded as assessable income of that taxpayer.

4.8.9 Limitation of Tax Losses from Farming or Landowning

Note: Refer to Section 4.15 for proposed changes.

As from the 1984 or subsequent income years, losses up to \$10,000 p.a. from specified activities may be deducted from other income. Losses above this limit must be carried forward and deducted from other income in following year(s) subject to the \$10,000 p.a. maximum.

"Specified activities" are animal husbandry (excluding bloodstock); trees or plants grown as a nursery; trees or plants grown for their crop (excluding annual crops where seed to harvest is less than 12 months with the exception of flowers. However, a taxpayer may elect to include his annual crops as a specified activity if it is to his advantage); viticulture; rock oyster farming; mussel farming; scallop farming; freshwater fish farming; sea-cage salmon farming; other livestock activities (i.e not husbandry); and property owning.

The \$10,000 limit does not apply to bona fide farmers who:

- Carry on an established (as at 11 October 1982) activity, a related activity, or a complementary activity,
- Have gained their livelihood from one property for at least 5 years and who diversify into another activity.

Hardship provisions allow the Commissioner to increase the \$10,000 limit where the taxpayer has been compelled to take outside employment in order to continue farming or to support his family. The farming activity must constitute the livelihood of the taxpayer or is being established as the taxpayer's livelihood.

Transitional provisions are available to farmers who were farming on 11 October 1982. These provisions enable any extra tax payable as a result of the \$10,000 loss limit arising for the 1984-1986 income years, to be paid in three equal instalments in the following year(s). Interest, at the rate of 1% per month is charged on the tax which is deferred. This interest is itself tax-deductible.

4.8.10 Timber Sales and Farm Forestry

Note: Refer to Section 4.15 for proposed changes.

Income from the sale of timber, including standing timber and trees planted for agricultural purposes but excluding ornamental or incidental trees, is assessable but may be spread over the year of sale and up to 3 preceding years.

Expenditures relating to the planting and growing of timber, including depreciation on plant and machinery used in the forestry operation, which have been incurred since 9 November 1984 are fully tax-deductible.

Expenditures incurred since 9 November 1984 in developing the land for timber production, e.g. land clearing, drainage, access tracks, irrigation, fencing, etc. are tax deductible in a manner similar to that provided for farm development expenditure, i.e. can be apportioned over the year in which the costs were incurred and up to the following 9 years. It should be noted that this expenditure is distinct from that relating to the planting and maintenance of timber referred to in the previous paragraph.

Expenditures incurred prior to 9 November 1984 were subject to different taxation treatment. Refer previous Budget Manual for details.

4.8.11 Income Levelling Schemes

Several schemes are available to taxpayers who derive income from agriculture which may serve to dampen the fluctuations inherent in farm incomes and subsequent taxation payments.

1. Farm Income Equalisation Scheme

This scheme allows a farmer to smooth his income from year to year by permitting him to reduce his assessable income by the amounts which he deposits with the Inland Revenue Department. These deposits are retained in the Farm Income Equalisation Reserve Account in the farmer's name at the Reserve Bank. When amounts are withdrawn at a later date, they become assessable income.

Deposits.

Assessable income is reduced by the amount deposited during a year. Deposits may, however, be used to reduce the income of the immediately preceding year upon the taxpayer's written election, provided the deposit is made with the shorter of:

- 6 months after balance date; or
- 1 month after the due date for filing the return of income.

The maximum amount of deposits in any one year is the assessable farm income for that year, and each deposit must be a minimum of \$200 (except the last deposit to make up the maximum).

The minimum period of deposit is one year (able to be relaxed under certain circumstances) and the maximum period for any one deposit is five years.

Generally no deposit can be made in a year when the farmer voluntarily withdraws funds from his reserve account.

3% interest is paid on deposits held from 1/4/77 (except those withdrawn within one year), and credited to the appropriate deposit.

Withdrawals

Compulsory refunds are made if a deposit reaches the maximum term of five years. Voluntary refunds (withdrawals) can be made at any time but must be made from funds deposited for a minimum period of 12 months, subject to the following exceptions:

- a. If deposits for 6 months or more, funds may be withdrawn:
 - for immediate expenditure on planned development or maintenance work
 - To purchase livestock
 - To avoid hardship
- b. If deposited for less than 6 months, funds may be withdrawn:
 - For immediate expenditure on unplanned development or repair work resulting from an adverse event
 - To purchase replacement livestock due to an adverse event
 - To avoid hardship.

All refunds become assessable income in the income year when the application is made, or the immediately preceding year on the same conditions as for deposits.

A refund will not attract more tax than the deposit saved.

Refunds are made from the oldest deposits first.

The minimum refund is \$200 unless the account balance is smaller; the maximum is the account balance.

Special rules apply where the refund is due to the retirement, death, or bankruptcy of the farmer.

2. Deferral of Expenditures on Development, Fertiliser and Lime

- refer to section 4.8.7.

3. Nil Value of Livestock

- refer to section 4.8.4.

4. Livestock Incentive Scheme

The tax option (a deduction of \$24 per qualifying stock unit) provides limited flexibility for the smoothing of income.

5. Estimates of Provisional Income

A provisional taxpayer can estimate his provisional income, and pay provisional tax accordingly. Re-estimates can be made up to the due date of the last instalment of provisional tax - refer to section 4.2.

4.9 HORTICULTURE

The following provisions relate specifically to horticulture, but readers should also familiarise themselves with the general farming provisions.

Purchase of land, including conveyancing fees, is capital expenditure and is not deductible. However, legal fees incurred in arranging finance to purchase the land, or in arranging to lease the land, will be tax deductible.

Buildings are capital expenditure and subject to depreciation allowances as for a farm (refer section 4.8.5).

New farm buildings and employee accommodation	First year and ordinary depreciation
Taxpayer's dwelling	25% of ordinary depreciation

Shelter belts - the cost of planting and maintaining shelter trees is tax deductible (refer section 4.8.7).

Development expenditure (Note: Refer to Section 4.15 for proposed changes) - the cost of preparing land for agricultural purposes, including the cost of original fencing, is tax deductible as development expenditure (refer section 4.8.7). Note that this applies to the preparation of the land only. Thus the cost of fruit trees and of planting them would be capital expenditure of a fruitgrower as it is not regarded as preparation of the land, but rather is part of the operation of fruitgrowing.

Expenditures on plants and planting for asparagus and berryfruits (e.g. blackcurrants, raspberries, strawberries, etc.) should be treated as follows:

- Plant life span of 1 to 5 years: costs either written off in year incurred or over the life span of the plants,
- Plant life span of 6 to 20 years: initial costs are not tax deductible, but subsequent replantings are fully deductible in the year of replacement,
- Crop rotation programme: cost of replacement crop and its planting is deductible in the year incurred so long as overall area under cultivation does not increase.

Recurring annual costs until production. Where there is a period between establishment and the production of the first crop, the annual recurring expenses would be tax deductible when incurred notwithstanding that they are incurred to earn profits in future years. For example, an orchardist would be entitled to deduct expenditure on cultivation, pruning, spraying, rates, insurance, depreciation, etc. in the year the expenditure is incurred.

Hail Damage - compensation payments received by orchardists for hail damage made to fill a gap in the profits are assessable income in the year received.

Growing crops of fruit, vegetables etc. are a capital asset and are only regarded as trading stock when they are harvested or severed from the ground.

Valuation of nursery stock:

- Immature plants - nil value as not readily saleable. This applies irrespective of whether the plants are grown in the ground, in pots, trays, bags, etc.
- Mature plants - suitable for sale and severed from the land. Valued at cost price, market value or replacement price.
"Cost" can be:
 - 50% of selling price for plants propagated and grown in pots, trays, or bags.
 - actual cost for plants bought in from other growers.
 - nil value for plants which are still growing the ground.
- Pots and containers should be valued at cost price, market value or replacement price.

Valuation of orchid plants:

- Immature plants - nil value, irrespective of place grown.
- Mature plants - valued at cost price (i.e. 50% of selling price), market value, or replacement price.
- Plants purchased from other growers should be valued at actual cost.

Horticulturists qualify for the Farm Income Equalisation Scheme (refer section 4.8.11).

Schedule Rates of Depreciation:

ITEM	%
Agricultural plant, and equipment including tractor drawn implements.	10 DV
Self-propelled equipment	20 DV
Cloches	Replacement or Annual Revaluation or Standard Value
Irrigation/frost protection plant - i.e. pumps, pump housing, sprinkler, standards, pipelines.	10 DV or Development Expenditure
Glass houses - wooden framed	5 CP
- metal framed	3 CP
Hop frames	Replacement or Annual Revaluation or Standard Value or Development
Hop kilns	15 DV
Plastic pots for tomato growing	Standard Value (20c each)
P.V.C. Tunnel houses	7.5 CP plus maintenance
Spray plant (orchardists)	
Self propelled and air-blast units	20 DV
Others	10 DV
Tomatoes-structure for shading plants	5 CP
Trickle irrigation equipment in glasshouses	25 DV

4.10 FISHING INDUSTRY

The following provisions relate specifically to the fishing industry but readers should also familiarise themselves with the previous sections.

In general 'fish' includes shellfish and crustaceans.

4.10.1 Spreading of Repair Costs on Fishing Boats

Expenditure incurred in making repairs or alterations necessary to obtain a certificate of survey under the 'Shipping and Seamen Act 1952' may be deferred in whole or in part and claimed at the written election of the taxpayer in the year of expenditure and up to four succeeding years. The expenditure covers repairs and alterations to the hull, equipment or machinery, and must be ordinarily deductible as 'repairs and maintenance' (i.e. would not be regarded as capital expenditure).

4.10.2 Depreciation

1. First Year Depreciation

Allowances available to the fishing industry include:

New or used plant and machinery	25%
New buildings or building improvements required for fish export hygiene purposes	30%
Employee Accommodation	20%

Note: First year depreciation allowances for fishing will terminate at the end of the 1988 income year.

2. Ordinary Depreciation

In addition to the relevant items specified in section 4.8.5, the following schedule rates may apply.

ITEM	%	
Cool stores and freezing chambers		
Buildings	3	CP
Plant	10	DV
Fishing Vessels		
Registered Hull, including fixed gear and refrigeration rooms.	10	DV
Deck machinery, winches and motors	15	DV
Main engine	20	DV
Fish Processing Buildings	4	CP
Fish Processing Plant	15	DV

Wooden fish boxes and plastic fish

Replacement only
containers or
Standard Value or
Annual Revaluation

Radio	- Receivers	20	DV
	- Telephones	20	DV
	- Testing equipment	20	DV
	- Transmitters	20	DV

3. Additional Depreciation on Certain Capital Expenditure on Fishing Boats.

Capital expenditures incurred prior to the 1989 income year which arise from Marine Department surveys of fishing boats may be depreciated at the rate of 25% in the year incurred and in each of the 3 succeeding years. Such expenditures include alterations to the hull, and costs of acquiring, installing or extending equipment or machinery for use in a fishing.

4.10.3 Fishing Investment Allowance

Terminated on 31 March 1983.

4.10.4 Development Expenditure - Fish Farming

Note: Refer to Section 4.15 for proposed changes.

Certain capital expenditure by rock oyster or mussel farmers or freshwater fish farmers may be claimed as a tax deduction if incurred prior to 31 March 1987. Such expenditure may be deferred in whole or in part and claimed at the written election of the taxpayer in the year of expenditure and up to nine succeeding years. The types of expenditure which qualify are:

Rock Oyster Farming

- Acquisition and preparation of spatting sticks;
- Construction and erection of posts, rails, or other structures for the holding of spatting stocks during spat catching and maturing;
- Construction of fences (including breakwater fences).

Mussel Farming

- Acquisition, preparation and mooring of pontoons, rafts, or other floating structures for collecting spat;
- Acquisition, mooring and outfitting of moored floating platforms from which the collected spat is suspended for subsequent growth;
- Collecting and depositing of shell or other suitable material on the sea bed to create spatting surfaces;
- Acquiring, outfitting and mooring of the special long lines on which mussels are cultivated.

Scallop Farming

- Acquisition, preparation and mooring of floating structures for collecting spat.
- Acquisition, mooring and outfitting of longlines from which the collected spat is suspended for subsequent growth.

Sea-Cage Salmon Farming

- Acquisition, preparation and mooring of pontoons, rafts, or other floating structures for securing or protecting cages or other containment vessels;
- Acquisition, preparation, and placing of equipment or structures, including tanks, cages, nets or other vessels, for the containment of live salmon;
- The acquisition and placing of ropes and buoys used in the breeding or maturing of salmon.

Freshwater Fish Farming

- Ground testing;
- Drilling of water bores;
- The draining of land and the excavating of sites for ponds, tanks or races;
- The construction of races, sluices, ponds, settling ponds, and tanks of impervious materials to conduct or contain water.
- The supply and installation of pipes for water reticulation;
- The construction of walls, embankments, walkways, service paths, and access paths;
- The supply and installation of baffles or screens for the containing or excluding of fish;
- The construction of fencing on the fish farm;
- The construction of effluent ponds and channels.

All provisions relating to deductibility of farm development expenditure apply similarly to this expenditure, including the position on termination of the qualifying period where the taxpayer has embarked on an approved "development plan" before that date, as well as recovery of development expenditure allowed if the area is sold within ten years (refer section 4.8.7 and 4.8.8).

4.10.5 Income Equalisation Scheme

Taxpayers engaged in the business of fishing are able to make deposits under the farm income equalisation scheme, and for this purpose "fishing" includes rock oyster farming, mussel farming, and freshwater fish farming. For details refer to section 4.8.11.

4.11 EXPORT INCENTIVES

This section outlines the major incentives which could apply to primary producers who are involved in exporting. For reasons of brevity, only selected aspects have been included, and care must be exercised when applying these guidelines to any particular circumstance. Your accountant or the appropriate authority should be consulted regarding queries.

The current export incentives aim to reward the taxpayer in proportion to his performance in generating foreign exchange which is remitted back to New Zealand. They take the form of a tax credit (i.e. rebate), or a cash refund in the case of exporters who are in a tax loss situation. These incentives are:-

- Export performance incentive for qualifying goods.
- Export performance incentive for qualifying services and/or overseas projects.
- Export performance incentive for qualifying tourist services.

4.11.1 Export Performance Incentive for Qualifying Goods

The incentive allowance is given as a refundable tax credit, the rate of which varies according to the local domestic content of the goods exported. The amount of tax credit is calculated by multiplying the total value of f.o.b. export sales for a particular product by the specified rate of tax credit. The specified rate of tax credit is found in a schedule prepared by the Department of Trade and Industry which lists export commodities and their associated value added band and the rate of tax credit. The following table shows the domestic value added bands and rates of incentive allowance:

Band	Domestic Value Added	Rate of Tax Credit
A	80 - 100%	11.9%
B	70 - 80	10.5%
C	60 - 70	9.1%
D	50 - 60	7.7%
E	40 - 50	6.3%
F	20 - 40	4.2%
G	0 - 20	1.4%

The incentive is available to an exporter as export merchant of qualifying goods. The incentive is not available to co-operative dairy, milk marketing or pig marketing companies (unless their export goods give rise to assessable income), to non-resident mineral development companies as to mineral mining companies.

An "exporter" is a manufacturer, producer or processor of qualifying goods who must have:

- Exported the goods from New Zealand; and
- Sold or otherwise disposed of the goods to an overseas purchaser; and
- Been the owner of the goods at the time of the sale or disposal.

The taxpayer can engage a commission agent to export the goods on his behalf so long as he remains the owner of the goods up to the point of sale to the overseas purchaser; but if the goods are sold or otherwise disposed of to the agent then it is the agent and not the manufacturer who can claim the incentive deduction.

An "export merchant" is the person or firm that:

- Purchases goods from the manufacturer or other supplier and directly contracts the sale of those goods with an overseas buyer; and
- Is responsible to the overseas purchaser for the quality, quantity and delivery of the goods sold; and
- Is entitled to receive payment for the goods from the overseas purchaser; and
- Is actively engaged in seeking out export opportunities for New Zealand products.

Qualifying goods are those which are specified in the schedule of export goods by the Department of Trade and Industry. Expressly excluded from qualifying as export goods are those goods exported by way of gift, gifts sold in a duty free context, consumable provedore goods and imported goods which are exported without any New Zealand added content.

The export performance incentive for export goods is supplemented by the export programme suspensory loan scheme (See Section 4.11.5).

Example:

Assume qualifying goods exported were:

Band A	f.o.b. sales	\$100,000
B	f.o.b. sales	\$200,000
C	f.o.b. sales	\$300,000

Export Performance Incentive is calculated as:

\$100,000	x 11.9%	=	11,900
200,000	x 10.5%	=	21,000
300,000	x 9.1%	=	27,300
Total incentive tax credit			<u>60,200</u>

The incentive for export goods will terminate as follows:

- 1985 income year - 100% incentive
- 1986 income year - 50% incentive
- 1987 income year - 25% incentive
- 1988 income year - nil incentive

4.11.2 Export Performance Incentive for Qualifying Services and/or Overseas Projects

Any taxpayer who provided professional or technical services overseas will be entitled to a refundable tax credit based on the net foreign currency earnings which are either remitted back to New Zealand or are paid out of funds held in New Zealand. Qualifying services include advisory services relating to the establishment or development of any farming, agricultural, horticultural, fishing, or forestry project.

Example:

Gross fees from qualifying services	\$20,000.00
less overseas expenditure	5,000.00
Net foreign currency earnings	<u>\$15,000.00</u>

Net foreign currency earnings transferred to New Zealand through the N.Z. banking system	\$10,000.00
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Tax Credit for 1987 is 2.975% of \$10,000 i.e.	<u>\$ 297.50</u>
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The incentive for qualifying services will terminate as follows:

- 1985 income year - 100% incentive (11.9% tax credit)
- 1986 income year - 50% incentive (5.95% tax credit)
- 1987 income year - 25% incentive (2.975% tax credit)
- 1988 income year - nil incentive

4.11.3 Export Performance for Qualifying Tourist Services

Any taxpayer who provides "tourist services" (viz, supply of accomodation, sustenance, internal transport and admission to the use of visitor facilities to tourist who pay for these services in foreign currency prior to arrival in New Zealand), and is actively engaged in attracting oversease tourists, will be entitled to a refundable tax credit based on the net foreign currency earnings which are either remitted back to New Zealand or are paid out of funds held in New Zealand.

The incentive for qualifying services will terminate as follows:

- 1985 income year - 100% incentive (10% tax credit)
- 1986 income year - 50% incentive (5% tax credit)
- 1987 income year - 25% incentive (2.5% tax credit)
- 1988 income year - nil incentive

4.11.4 Export-Market Development and Tourist Promotion

Incentive

Any taxpayer who incurs qualifying expenditure will be entitled to a refundable tax credit equal to a specified percentage of such qualifying expenditure.

To qualify for the incentive, the export tourist promotion expenditure must:

- Be tax-deductible under general taxation law (i.e. capital expenditure would not qualify); and
- Are regarded as have been incurred primarily and principally for the purposes of seeking markets (including the retention of existing markets) or the obtaining of market information or market research, or creating or increasing demand for the export of goods that have been manufactured, produced, assembled, processed or packed or graded and sorted in New Zealand. "Services" means services in relation to construction projects, courses of educational training or the furnishing of technical advice or assistance; or
- Have been incurred primarily and principally for the purpose of attracting tourists to New Zealand.

Qualifying expenditures in general, are only those costs which are incurred outside New Zealand in promoting exports, and include, amongst others:

- Overseas travel and accommodation expenses.
- Salaries and wages paid to New Zealand based employees in respect of the time spent outside New Zealand.
- Expenses (including those incurred in New Zealand) of advertising outside New Zealand.
- Direct costs of providing samples or technical information to persons outside New Zealand, reduced by any consideration received.
- Costs incurred outside New Zealand in the preparation or submission of tenders or quotations, or in sales promotion activities or campaigns.
- Payments to overseas agents for the purposes of activities carried on outside New Zealand.

Expenditures which do not qualify for the incentive include:

- Entertainment expenses.
- Director's fees.
- Salaries and wages paid in respect of employee's time within New Zealand.
- Payments to agents for work carried out within New Zealand.
- Costs of advertising inside New Zealand.

- Commissions on sales.
- Expenditure in respect of which an Export Programme Grant or a Tourism Export Programme Grant has been received. However, the proportion of expenditure not reimbursed by the grant will be allowed as an ordinary deduction from assessable income.

Where the tax incentive credit is allowed in respect of qualifying expenditure, the same expenditure cannot be deducted from assessable income.

The available tax credits are proposed to be:

1987 income year	69 % tax credit
1988 income year	64 % tax credit
1989 income year	58 % tax credit
1990 income year	53 % tax credit

Example:

Assume that the taxpayer has received an export program grant (of \$12,800) in respect of qualifying expenditure of \$20,000 in the 1987 income year.

Qualifying Expenditure:

Salaries and Wages	\$17,000
Overseas travel and accommodation	5,250
Net cost of samples	750
Advertising overseas	<u>2,000</u>
Total qualifying expenditure	25,000

less Qualifying expenditure in respect of which a grant was made	<u>20,000</u>
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Expenditure which qualifies for tax credit	\$ <u>5,000</u>
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Tax Credit is 69% of \$5,000, i.e.	\$ <u>3,450</u>
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4.11.5 Export Market Development Activities Incentive for Self-Employed Taxpayers

Any taxpayer (not being a company) who is in business on his own account or as a member of a partnership who has engaged in market research, securing publicity or soliciting business, or supplying services outside New Zealand in relation to construction projects, education training courses, or technical advice or assistance, will be entitled to a refundable tax credit equal to a specified percentage of the "value of time" spent on these export-market development activities outside New Zealand.

The "value of time" is calculated as:

$$\frac{(a \times b) - (c \times \frac{100}{64})}{2}$$

where:

- a Is half the minimum hourly rate usually charged by the principal of a New Zealand firm for the particular profession or occupation of the taxpayer. If there is no customary rate, the Commissioner may determine a reasonable rate.
- b Is the number of complete hours spent on export-market development activities in the income year.
- c Is the amount of any export program grant or export market development grant received in respect of the time spent by the taxpayer in export market development activities.

The available tax credits are proposed to be:

1987 income year	69 % tax credit
1988 income year	64 % tax credit
1989 income year	58 % tax credit
1990 income year	53 % tax credit

Example:

Assuming:

The taxpayer spent 1,000 hours on qualifying export-market development activities during 1987 income year.

The minimum charge-out rate for the taxpayer's profession is \$20 per hour; and

During the year, the taxpayer received an Export Program Grant in respect of the value of time of \$1,920, then the value of time will be:

$$\frac{(\frac{\$20}{2} \times 1000) - (\$1920 \times \frac{100}{64})}{2}$$

$$= \$3,500$$

Tax Credit is 69.% of \$3,500 i.e. \$2,415.00

4.11.6 Export Programme Suspensory Loan Scheme

N.B. Applications closed 23 May 1985

This scheme is to assist substantial and proven exporters of goods and services to generate greater net foreign exchange earnings. The assistance is in the form of a suspensory loan, paid in advance, to cover 40% of the qualifying expenditure to be secured in a target market. The loans will convert to a grant if the sales targets are met. The loan, plus interest, must be repaid if the targets are not met. The balance of the qualifying expenditure may be claimed as an ordinary tax deduction.

To be eligible for the incentive, the exporters must:-

- Be a New Zealand taxpayer;
- Own the goods at the time of export or perform the services as appropriate;
- Have achieved net foreign exchange earnings of at least \$250,000 in one of the 3 years prior to application;
- Personally incur the promotional expenditure; and
- Be responsible for and retain control over the promotional programme.

Eligible expenditure is the same as for the tax credit incentive for export market development expenditure (outlined in previous Budget Manuals) subject to limits on salaries and sustenance costs.

The maximum loan is the lesser of \$200,000 as 30% of the net foreign exchange earnings for the programme year after making an adjustment for market maintenance where appropriate.

The loan is for 36 months, and is renewable at the end of the 1st and 2nd years upon the exporter showing that he has met the specified sales forecasts.

4.12 DISPOSITIONS OF MATRIMONIAL PROPERTY

Since 28 July 1983, one spouse may transfer matrimonial property to the other spouse under Section 21 of the Matrimonial Property Act 1976 without giving rise to a subsequent liability for income tax. Transfers of matrimonial assets made by Court order under Section 25 of the Matrimonial Property Act 1976 are totally exempt. (For Estate and Gift Duty provisions refer to Section 5). The legislation basically allows assets to be transferred at book values rather than market values.

Legislation of relevance to the agricultural sector regarding matrimonial transfers include the following:

- Transfers of land are deemed to be at the original purchase price which the taxpayer paid for the land, i.e. no profit on sale.
- Transfers of land with growing timber on it shall be regarded as a sale of timber, but may be transferred at cost price.
- Livestock may be transferred at the same standard value (including nil value). The progressive write down provisions apply to the spouse only to the extent that they would apply to the taxpayer.
- Trading stock, including livestock, may be transferred at the higher of the (standard) values adopted by the taxpayer (transferor) and spouse (transferee).
- As a general rule, if a leased asset is acquired and then sold at a profit, such profit is regarded as assessable income (the maximum being the lease payments previously claimed as tax deductions). Matrimonial transfers of this "leased" asset are deemed to be at book value, so that any profit on a subsequent sale will be assessable in the hands of the transferee.
- The rights of ownership of an asset will accompany the asset if it is transferred under a matrimonial agreement. These relate to depreciation, the recovery of depreciation upon disposal of the asset, the claiming of the relevant investment allowances, and the recovery of the investment allowance if it is disposed of within 12 months of the original purchase.
- Interest and development expenditure can be recaptured if land, fish farms, or certain assets are sold within 10 years of acquisition (refer Section 4.8.8). Transfers of land under a matrimonial arrangement, however, will not be treated as a disposal for the purposes of the recapture provisions. The legislation deems the transferee to have:

Purchased his/her share at cost price (book value for appropriate assets) on the date the property was acquired by the transferor; and

Claimed the same development expenditure and interest deductions as the transferor.

Hence the recapture (clawback) provisions will apply to the transferee if he/she sells the property within 10 years of original acquisition by the transferor.

- The \$10,000 loss limitation on specified activities which may be offset against other income (refer Section 4.8.9). Under this legislation, losses from an established activity may be offset without limit. If this established activity is transferred to a spouse under a matrimonial agreement, then it retains its established activity status in the hands of the transferee. The date of acquisition is deemed to be the date on which it was acquired by the transferor. (This has relevance to the concessional provisions where land has been held continuously for 5 years).

Reference should also be made to the proposed changes in the taxation of primary producers, Section 4.15

4.13 FRINGE BENEFITS TAX

4.13.1 General Provisions

The 1984 Budget introduced a fringe benefit tax with effect from 1 April 1985. Fringe benefit tax is payable at the rate of 48% (45% prior to 1 April 1986) of the taxable value of fringe benefits provided to employees, and is payable by the employer at quarterly intervals. For each quarter the employer must complete a return form setting out details of benefits granted and the tax payable, and send the return with payment to the Inland Revenue Department by the 20th of the month following the end of each quarter. There is a compounding 10% penalty for every six months the tax remains unpaid. Records must be retained for 10 years. Fringe benefit tax is levied on all employers, irrespective of whether they are taxable entities or are in a tax-loss situation, and is not deductible for income tax purposes.

The tax is payable by every employer who directly or indirectly grants a fringe benefit to an employee (which includes a former employee or a prospective employee). An employee is a person who receives payments from which PAYE tax has been deducted by the employer (e.g. wages), but excludes a partner's salary, national superannuation, earnings related accident compensation, or a with-holding payment paid to a non-resident contractor. An employer is the person who pays the employee.

A private company does not pay fringe benefit tax on fringe benefits granted to any shareholder employee who is a major shareholder (one who holds at least a 10% interest in the company). In such a case the cost of providing the benefit is not deductible to the company and the recipient is assessed as having received a dividend. A private company does pay fringe benefit tax on benefits granted to employees with no interest, or less than 10% interest, in the company.

Note: These provisions apply since 1 April 1986.

The previous provisions are contained in the 1986 edition of the Financial Budget Manual.

4.13.2 Definition of "Fringe Benefit"

A fringe benefit is any benefit received by an employee which consists of:

1. The private use, or the availability for private use, of an employer provided motor vehicle with a gross laden weight of 3500 kg or less.
2. Low interest loans, excluding loans made to employees under an employee share purchase scheme.
Loans must be granted because the recipient is an employee. Loans granted because of a family relationship e.g. father to son, would not be deemed to be a fringe benefit to an employee.

3. Subsidised transport where the employer is a public carrier.
4. Other benefits, such as free, subsidised or discounted goods and services, e.g. free milk, meat, firewood etc. provided to a farm worker.

Benefits specifically excluded from Category 4 are:

- Amounts already assessable as income
- Amounts exempt from income tax
- Benefits provided in the place of allowances which would be regarded as exempt income
- Transportation in a vehicle not designed for the carriage of passengers.
- Benefits arising from the discounted price of shares acquired by employees under a share purchase scheme.
- Payment of tuition or examination fees of the employee or any child of the employee.
- Payment made by the employer to enable the employee to entertain current or prospective client/customers.
- Club subscriptions paid by employer, provided it would be ordinarily tax-deductible to the employer.
- Lump sum retiring allowance.
- Board, lodging and free/subsidised accommodation (as these are already assessable as income).
- Premiums paid by the employer for personal accident or sickness insurance for the benefit of the employee and/or the employee's family.
- Employer's contributions to approved superannuation funds and the like.
- Benefits provided and enjoyed on the business premises e.g. sports and recreational facilities, dining facilities etc.

There are two general exemptions for category 4:

- \$50 per employee per quarter; and
- There is no fringe benefit where an employee purchases an item from the employer at below cost price where the normal retail price does not exceed \$200 and:
 1. For sale goods-
 - a. The difference in price is made up of the discount to the public plus the usual staff discount, and
 - b. The price charged to the employee is no less than the smaller of 95% of cost or 95% of the price to the public, and
 - c. A reasonable quantity of these sale goods are available to the public.
 2. For non-sale goods, the price is not less than 95% of the retail price.

4.13.3 Calculation of Fringe Benefit Tax

General formula is:

$$= \frac{\text{Value of fringe benefit} - \text{employee's contribution}}{\text{Taxable value of fringe benefit}} \quad (\text{except for low interest loans})$$

=====

The amount of fringe benefit tax payable is calculated as the taxable value of fringe benefit multiplied by the rate of FBT (48% from 1 April 1986, 45% for 1985/86 income year).

4.13.4 Value of Fringe Benefit

1. Motor Vehicles

$$\text{Value of benefit} = \frac{\text{No. of days available for private use} - (\text{max. } 90)}{90} \times Z$$

The following are regarded as days when the vehicle was not available for private use:

- Any day when the employee used the vehicle to leave home to attend an "emergency call" (define to be between 6 pm and 6 am on a working weekday, or on any Saturday, Sunday or public holiday, and involves the protection of plant or machinery of the employer or a customer of the employer).
- Any day when an employee uses the vehicle for regular business-related trips of at least 24 hours duration.
- Any day on which the vehicle is regarded as a "work related vehicle" (defined to be a vehicle with gross laden weight less than 3500 kg other than a car, which has the employer's identification (e.g. name, logo etc.) permanently affixed to the exterior and the only private use to or from work or is incidental to the business use).
- **Note:** Vehicles with a fold-down rear seat will be regarded as a "van" (i.e. work-related) only if the rear seat is removed or permanently folded down, e.g. welded in the folded down position.

Z is 6% of

- cost price of vehicle; or
- market value of vehicle at commencement of lease; or
- average cost of vehicle if from a vehicle pool (as appropriate).

Taxable value = Value of benefit - Employee Contributions

Employee contributions towards the cost of private use of the vehicle may take the form of:

- Payment of all or part of the running costs
- Reimbursing employer for the use of the vehicle

- 2.5% of the cost price of the vehicle to the employee (where the vehicle is jointly owned).

2. Low Interest Loans

Taxable value of benefit = Interest calculated on daily balance at the prescribed rate of interest less the interest actually payable by the employee

The prescribed rate of interest is as follows:-

- For loans made after 31 March 1985 or having variable interest rates, the Prescribed rate is set annually by Regulation. (Currently 14%)
- For loans made prior to 1 April 1985 and having fixed rate of interest, the Prescribed rate is the "non-concessionary rate of interest" for that particular year as set by special regulation.

3. Subsidised Transport

Taxable value = 25% of highest cost to public for that class of travel, or the amount paid by employee

4. Other Benefits

Taxable value = Value of benefit - amount paid by employee

Free or Discounted Goods

- Where the goods are manufactured by the employer, the value of the benefit is the lowest price at which identical goods are sold on an arm's length basis.
- Where the goods are purchased by the employer, the value of the benefit is the cost to the employer.
- Where the employer is a company included in a group of companies, the value of the goods can be determined at the company's option by applying the principles in the two points above as if the group were one company.

Note: The value of the benefit is the lower of the cost as determined above as the market value on the day of supply to the employee.

- If the value cannot be determined by the methods above, then the value is set at normal market price or such amount as the Commissioner may decide.

Free or Discounted Services

The value of the benefit is, in general, the normal arm's length price charged for the services.

4.14 GOODS AND SERVICES TAX (GST)

4.14.1 Overview

GST is a broad based tax on consumption, and will be levied at a rate of 10% on virtually all goods and services supplied in New Zealand, on or after 1 October 1986. Exported goods and services will be taxable but at a rate of zero per cent. GST will also be imposed (at the rate of 10%) on all goods and services imported into New Zealand on or after 1 October 1986.

Only persons who conduct a "taxable activity" are required to register for GST purposes, and will be liable to charge and account for GST. To arrive at the net amount of GST payable to the IRD, registered persons (traders) may deduct the GST which they paid on their inputs from the GST charged on their outputs. Thus, although GST will be charged at each stage of the production and distribution chain, it is only the final consumer who actually bears the full cost of the GST charged.

It should be noted that GST is only part of a financial package introduced by the Government. Accompanying GST will be other taxation reforms which alter the personal income tax scale, introduce family support packages, and alter the existing regime for indirect taxation.

"Goods" includes all kinds of personal and real property, excluding money.

"Services" are anything other than goods or money.

Registration

Any person/organisation whose turnover from taxable activities is over \$24000 p.a. must register, and charge and account for GST. Registration is optional for traders having a taxable turnover of less than \$24000 p.a.

A taxable activity is any activity which involves the regular supply of goods and/or services to any other person for a consideration. This is a wide definition which includes businesses, clubs, public and local authorities; but specifically excludes private recreational pursuits or hobbies, employment income, the directorship of a company (treated as employees), and the making of exempt supplies.

The following will be exempt from GST:

- The supply of financial services (if not zero rated);
- The supply of donated goods/services by a non-profit body;
- The supply of rented accommodation in a dwelling; and
- The sale of rental dwellings.

Certain supplies of goods and services are to be zero-rated. This means that the activities are taxable, but the rate of GST is zero.

Zero-rating occurs if:-

- The goods are exported or are supplied outside New Zealand,
- A taxable activity is supplied as a going concern to a registered person, e.g. a farm is sold as a going concern to a registered trader.
- The services were performed outside New Zealand,
- The services related to the transportation of passengers or goods to or from New Zealand
- plus others

4.14.2 Returns and Payment of GST

Registered persons must regularly furnish GST returns to the IRD. The standard period between returns is two months, but the taxpayer may choose to make monthly returns, or six monthly returns (but only if the value of taxable supplied does not exceed \$250,000 in the previous 12 months).

The GST return, which details the net amount of GST payable to the IRD (or to be refunded, as the case may be) is due within two months of the end of the appropriate return period. GST unpaid after that due date will attract additional tax at the rate of 10% for the first month, and a further 2% for each extra month the tax remains unpaid.

Accounting for GST is on an invoice (accrual) basis, although a payments (cash) basis may be adopted by:

- Public or local authorities
- Non-profit bodies
- Registered persons whose total taxable supplies is less than \$500,000.

The GST payable by (or refundable to) that registered person for a return period is calculated (in general) as:-

GST charged on outputs	(Output tax)
less GST paid on inputs	(Input tax)

If the output tax exceeds the input tax, the difference is paid to the IRD: if the output tax is less than the input tax, the difference is refunded to the taxpayer, or it may be used to offset other amounts due to the IRD.

Output tax is the GST charged in respect of the supply of goods and services made by the registered person. This amount may be calculated as:-

Total amount invoiced/received x "tax fraction"

NB: The "tax fraction" is calculated as

$$\frac{\text{GST rate}}{100 + \text{GST rate}}$$

and is 1/11 for a GST rate of 10%

or The total of the GST charged (if the accounting system actually accumulates this total).

Input tax is the GST charged in respect of goods and services supplied to the registered person. These will be detailed in the tax invoices obtained from the supplier, although the "tax fraction" approach may be used. Input tax would also include GST paid on imports.

Other deductions for specific circumstances may also be deducted from output tax (e.g. bad debts, adjustments, use of private/exempt assets, etc.)

4.14.3 Tax Invoices

A "tax invoice" must be held before GST paid on inputs can be claimed as a deduction (although this is not necessary if the amount supplied is less than \$20). The tax invoice is a document which contains details of the items supplied - namely

- The word "tax invoice";
- The name, address, and registration number of the supplier;
- The name, address of recipient;
- The date of issue of the tax invoice;
- A description of the goods and services supplied;
- The quantity/volume of the goods and services supplied;
- Either: the price excluding GST, the GST charged, and the GST-inclusive price; or the GST inclusive price and a statement that GST is included in the price. (GST can then be calculated using the tax-fraction method).

A regular "commercial" invoice would supply this requirement if the above details were included.

A slightly simplified invoice may be used where the amount supplied is less than \$100. Details required are:-

- The word "tax invoice";
- Name and registration number of supplier;
- Date of issue of the tax invoice;
- A description of goods and services supplied;
- The GST inclusive price and a statement that GST is included in the price.

No invoice is necessary if the amount supplied is less than \$20, or where it would be impractical to issue a tax invoice and the transaction can be verified by other means (e.g. an automatic payment from a bank account).

It is the responsibility of the supplier of the goods/services to issue a tax invoice. However, there is provision to allow the recipient (buyer) of such services to produce the tax invoice, provided the IRD agrees, both parties agree that the supplier will not issue the tax invoice, and that both parties receive a copy of the tax invoice. This provision has significance for the rural sector where it is common for the buyer to create a document which evidences a sale e.g. killing sheet from a meat works.

Where a registered person obtains second hand goods from a non-registered person, the purchaser/recipient of those goods must maintain records detailing:

- Name and address of supplier;
- Date of acquisition of the (secondhand) good;
- Description of the goods;
- Quantity or volume of goods;
- Price paid.

It is assumed that the purchase price paid by the registered person includes GST. The amount of GST can therefore be calculated by using the tax-fraction method.

$$\text{ie GST paid} = \text{purchase price} \times \text{tax fraction}$$

Where an agent is involved in a transaction, the law recognises that it is the principal who is actually receiving as providing goods and services. The agent may issue/receive tax invoices, and is required to maintain sufficient records to be able to ascertain the appropriate principal.

Sale through auctioneers are also subject to special rules, because often it is not known if the sale is taxable or not (i.e. whether the principal is registered). With the principal's agreement, the auctioneer can treat all sales as taxable; the tax collected is either remitted to the IRD by the auctioneer on behalf of an unregistered principal, or passed to a registered principal for him to account for. If there is no agreement to adopt this approach, the sale by auction will only be taxable if the principal concerned is a registered person selling goods in the course of his taxable activity.

Auctions may themselves be carried on either a tax-inclusive or tax-exclusive bidding basis - the latter requiring GST to be added to the successful bid. Each auctioneer will decide his individual approach.

The commission charged by the auctioneers, of course, subject to GST if the auctioneer is registered.

Records

Every registered person must keep adequate GST records, in English, for 10 years after the end of the taxable period to which they relate.

4.15 TAXATION REFORM BILL (No. 2)

The Taxation Reform Bill (No. 2) was introduced to Parliament on 2 October 1986, and has been referred to Select Committee. At the time of writing it had not been referred back to Parliament, so that changes to the bill may occur before legislation is enacted. The Bill proposes changes in the taxation regime for primary producers, as well as some proposals announced in the Budget.

4.15.1 Clawback Provisions

The clawback of interest and development expenditure deductions on farming properties sold within 10 years of purchase will be abolished as from 13 December 1985. "Farming" includes agriculture, horticulture, aquaculture and forestry.

4.15.2 Loss Offset Provisions

Losses derived in the 1987 or subsequent income year from livestock (other than bloodstock) and in growing annual flowers may be offset in total against other income.

The \$10,000 loss limitation will continue to apply to horticulture and aquaculture, and to the rental of property.

4.15.3 Farmers' Expenditure on Tree Planting

Farmers expenditure on tree planting is to be phased out over a five year period as follows:

<u>Income year</u>	<u>Expenditure deductible</u>
1987/88	90% (maximum \$2500)
1988/89	75% (maximum \$2500)
1989/90	55% (maximum \$2500)
1990/91	30% (maximum \$2500)
1992 onwards	Lesser of actual expenditure or \$2500

The amount which qualifies as development expenditure may be allocated to any one of the 9 income years following the year the expenditure was incurred.

The amount of "development expenditure" which is not claimed as a tax-deduction (see above), is to be capitalised as an asset and can be depreciated at the rates set out in Appendix III (section 4.16.3)

4.15.4 Expenditures on Land Improvement

The ability to deduct development expenditures against income derived by agricultural, horticultural, and aquacultural businesses will be phased-out over five years commencing with the 1987/88 income year, as follows:

<u>Income Year</u>	<u>% Development Expenditure which will be deductible</u>
1987/88	90
1988/89	75
1989/90	55
1990/91	30
1992 onwards	0

4.15.5 Forestry

Development Expenditure

A forestry business which held or owned land as at 12 December 1986 which was planted prior to 31 December 1986 may continue to deduct development expenditures until the end of the 1997 income year.

A "new" forestry business will not receive this concession, but will be subject to the same phasing out of development expenditures as for a farmer. (see Section 4.15.4).

The amount which qualifies as development expenditure may be allocated to any of the income years up to and including the 1999/2000 income year.

The amount of development expenditure which is not claimed as a tax deduction is to be capitalised and depreciated at the rates set out in Appendix III (section 4.16.3)

Forestry Planting and Maintenance

A forestry business which held or owned land as at 12 December 1986 which was planted prior to 31 December 1986 may continue to deduct maintenance costs in full up to the end of the 1997 income year.

The ability of "other" forestry businesses to deduct expenditures on planting and maintenance expenditures will be phased out on the same basis as for development (see above) so that after the 1991 income year, no such expenditures will be deductible. Instead, such expenditures are to be capitalised to a "cost of timber" account which can only be deducted when income from those trees are realised.

The following items will continue to be tax-deductible in the year the expenditure is incurred:

- Rent, rates, land tax, insurance premiums, administrative overheads, or other like expenses.
- Weed, pest or disease control after trees have been planted. (Excludes releasing).
- Interest on money borrowed.

- Repairs and maintenance on plant and machinery used to develop land or to plant or maintain trees.
- Repairs and maintenance on land improvement (not trees).
- Depreciation on plant and machinery used to develop land or to plant or maintain trees.

Other maintenance costs (excluding land contouring but including depreciation of land clearance costs) are to be capitalised to a "cost of timber" account. These costs are to be carried forward and offset against income realised from the sale of that timber.

4.15.6 Valuation of Livestock (excluding bloodstock)

The present standard value scheme (including nil values) for sheep, cattle, deer, goats, and pigs will be abolished from the commencement of the 1987/88 income year, and will be replaced with a regime which will be based on market values. Farmers will be required to value livestock under the following options:

- Sheep, Cattle, deer, goats and pigs:
Valuation options are:
 - Herd basis
 - Trading stock basis
- Other livestock valuation options are:
 - Cost price, market value or replacement price
 - Standard value as agreed by the Tax Department (as per the "old" standard value system)

Valuation of Sheep, Cattle, Deer, Goats and Pigs

Herd Basis

- Eligible livestock are mature animals which are held primarily for the production of progeny, wool milk, velvet or fibre.
- Herd livestock are to be valued at the beginning and end of the income year at the "herd value", which is 100% of the (national) average market value of the appropriate livestock as declared for that income year.
- Once in the herd, fluctuations in the market value of the herd livestock do not affect the amount of taxable income.
- Items which affect taxable income are"
 - Costs of replacements (tax-deductible)
 - Sales of culls (taxable)
 - Changes in numbers of the herd
 - Changes in the composition of the herd
 - Transactions affecting livestock not in the herd.
- Immature Animals and other livestock not in the herd scheme must be valued as Trading stock.

Trading Stock Basis

There are two main methods of valuing livestock:

1. Cost price, market value or replacement price, at the taxpayers option.
N.B. Cost is not available if the taxpayer has inadequate records or if the taxpayer has bailed the livestock at any stage during the year.
2. Standard Value
70% of a 3 year rolling average based on the (national) average market value of the appropriate livestock as declared for the appropriate income years.

General provisions relating to the valuation of livestock for tax purposes are as follows:

- Market values of sheep, cattle, deer, goats and pigs will be published annually by the Tax Department.
(See Appendix IV for the 1986 livestock values)
- Standard values for other livestock are as agreed with the Tax Department.
- Sheep, cattle, deer and goats less than 12 weeks old at balance date are to be valued at 50% of their standard value.
- Commencing with the 1986/87 income year, new farmers and existing farmers who develop or purchase additional land will be required to progressively write down the value of new or additional (ie excluding replacement) livestock purchased in that year or the subsequent three years from cost price to the value for tax purposes in equal instalments over a 3 year period.
- High priced livestock owned for more than 6 months is subject to an annual write-down (ie depreciation) provided the animal is over 2 years of age (1 year for pigs) at balance date.

"High price" means that the purchase price is at least 3 times the previous year's average market value for cattle, deer, goats and pigs, and 4 times the previous years average market value for sheep.

The amount of write down is as follows:

Sheep	25% p.a.	(i.e. 4 years)
Cattle	20% p.a.	(i.e. 5 years)
Deer	15% p.a.	(i.e. 7 years)
Goats	20% p.a.	(i.e. 5 years)
Pigs	33.3% p.a.	(i.e. 3 years)

The new method of tax treatment commences at the end of the 1987 income year.

- It is permitted to change from one method of livestock valuation to another. Written notice of the change must be made a full 2 income years before the start of the income year when the change is to occur.

Transition to the new tax regime

The major steps in the transition process are as follows:

1. Choose a method of livestock valuation for the 1988 or 1989 year by the earlier of the due date for the taxpayers return or 30 November 1987. Special provision is made for the cost option - "cost" is deemed to be the same as the trading stock standard value.
2. Revalue livestock on hand at the end of the 1987 income year to 70% of market value (100% for the herd scheme).

Revaluation income =

$$\begin{array}{rcl} \text{(Smaller of 1987)} & & \text{(1987 closing} & \text{1987 opening)} \\ \text{(opening and) x} & & \text{(livestock} & \text{- standard)} \\ \text{(closing numbers)} & & \text{(value} & \text{value)} \end{array}$$

3. Calculate the amount of concessional income write-off as follows:

$$\text{Write-off} = \text{Base number} \quad \begin{array}{rcl} (70\% \text{ of } 1987 & & 1987 \text{ opening)} \\ \times \text{ (closing value} & & \text{- standard value)} \end{array}$$

The base number of livestock is, at the taxpayers option:

- The number on hand at the 1985 balance date, or
- The smaller of:
 - The number on hand at 12/12/85 (excluding livestock under 12 months of age, or
 - The number on hand at the end of the 1986 income year.

For a farmer who ceased farming between 12 December 1985 and the end of the 1986 income year, the write-off is calculated as:

$$(70\% \times \text{sale proceeds}) - 1987 \text{ opening standard value}$$

4. The excess revaluation income over the amount written off (if any) may be spread forward over a period of up to 5 income years (commencing 1987), with a minimum allocation of 20% p.a.

4.15.7 Taxation of Bloodstock

All bloodstock is to be valued at cost price. Stud stallions may be written down to \$1 over a period of 6 years, while broodmares may be written down to \$1 over a period of between 2 and 14 years depending upon the age when first used for breeding purposes. However, if the true market value of bloodstock is less than 50% of normal market value because of infertility, birth deformity or accident, then the true market value may be

used. Costs of breeding and rearing are to be capitalised until the animal is used for breeding. The write down provisions outlined above commence in the year in which the horse was first used for breeding purposes.

Adjustments to cost occur where breeding bloodstock is raced rather than used for breeding purposes. Expenditures add to cost, income received reduces the cost. It should be noted that, as from the 1988 income year, prize money received in respect of horses which are raced in the course of a bloodstock breeding activity will be regarded as assessable income.

Horses raced by a bloodstock breeder can be regarded as a "hobby" or can be treated as part of the business. Transfers from business to private use must be at market value. Once racing is regarded as a hobby, prize money received is exempt income.

Gains on sale or other disposal of breeding stock may be used to reduce the cost price of replacement livestock, if application is made within a specified period.

These provisions are due to apply from the commencement of the 1988 income year, with certain transitional provisions.

4.15.8 Miscellaneous Provisions

Depreciation Recovered

Costs of selling an asset may be deducted from the sale proceeds for the purposes of calculating the amount recovered.

Treatment of GST for income tax purposes

For a business registered for GST purposes, GST collected on sales is not assessable income and GST paid on items purchased is not a tax-deductible expense. However, if the user is not registered or where the purchase is for exempt purposes, GST forms part of the acquisition cost. Under these circumstances, it is proposed to allow GST paid to be tax-deductible.

Amongst the specific rules in the Bill, the following provisions appear:

- GST paid on a "taxable" fringe benefit is deductible for income tax purposes.
- Where a good or service is initially applied for the making of an exempt supply (and GST paid is claimed as a tax-deduction), and is then applied to the making of a taxable supply, then GST initially paid may be claimed back. The amount claimed back will be regarded as assessable income.

GST on assets

For a registered user, the depreciable cost of an asset excludes GST. For a non-registered user, the depreciable cost includes GST.

If the asset purchased is to be used for the making of exempt supplies, cost must be adjusted to include GST.

The sale price of an asset for income tax purposes will not include GST.

Export Incentives

Expenditures incurred after 1 December 1986 in relation to South Africa will no longer qualify for export incentives.

4.16 APPENDICES

4.16.1 Appendix I

Last Days for Payments
By Provisional Taxpayers

<u>Provisional Tax</u>			<u>Terminal Tax</u>	
Balance Month	1st Instalment	2nd Instalment	Companies	Others
Oct 19A1	7 Mar 19A1	7 Sep 19A1	7 Nov 19A2	7 Mar 19A3
Nov 19A1	7 Mar 19A1	7 Sep 19A1	7 Nov 19A2	7 Mar 19A3
Dec 19A1	7 Apr 19A1	7 Oct 19A1	7 Dec 19A2	7 Mar 19A3
Jan 19A2	7 May 19A1	7 Nov 19A1	7 Jan 19A3	7 Mar 19A3
Feb 19A2	7 Sep 19A1	7 Mar 19A2	7 Feb 19A3	7 Mar 19A3
Mar 19A2	7 Sep 19A1	7 Mar 19A2	7 Mar 19A3	7 Mar 19A3
Apr 19A2	7 Sep 19A1	7 Mar 19A2	7 Mar 19A3	7 Mar 19A3
May 19A2	7 Sep 19A1	7 Mar 19A2	7 Mar 19A3	7 Mar 19A3
Jun 19A2	7 Sep 19A1	7 Mar 19A2	7 Mar 19A3	7 Mar 19A3
Jul 19A2	7 Nov 19A1	7 May 19A2	7 Mar 19A3	7 Mar 19A3
Aug 19A2	7 Mar 19A2	7 Sep 19A2	7 Mar 19A3	7 Mar 19A3
Sep 19A2	7 Mar 19A2	7 Sep 19A2	7 Mar 19A3	7 Mar 19A3

**Proposed Months for Payment
Of Provisional and Terminal Tax**

Balance Month	<u>Provisional Tax</u>			<u>Terminal Tax</u>
	First Instalment (before bal- ance date)	Second Instalment (before balance date)	Third Instalment (before bal- ance date)	(after bal- ance date)
October	February (2)	June	October	September
November	March	July	November	October
December	April	August	December	November
January	May	September	January	December
February	June (3)	October	February	January
March	July (3)	November	March	February
April	August (3)	December	April	February
May	September	January	May	February
June	October	February	June	February
July	November	March	July	February
August	December	April	August	February
September	January	May	September	February

- Notes:** (1) Payment is due on the 7th day of the appropriate month
(2) For the 1987 year, the due date is March
(3) For the 1987 year, the due date is September

4.16.2 Appendix II

Rates of Income Tax for Individuals

Taxable Income \$	Amount and rate of tax
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1986/87 Income Year

Up to 6,000	17.5 % of income
6,001 - 9,500	\$1050.00 plus 24.0 % of income over 6,000
9,501 - 25,000	\$1890.00 plus 31.5 % of income over 9,500
25,001 - 30,000	\$6772.50 plus 37.55% of income over 25,000
30,001 - 38,000	\$8650.00 plus 52.05% of income over 30,000
Over 38,000	\$12814.00 plus 57.00% of income over 38,000

1987/88 Income Year

Up to \$9,500	15.0 % of income
9,501 - 30,000	\$1425.00 plus 30.0 % of income over 9,500
Over 30,000	\$7575.00 plus 48.0 % of income over 30,000

4.16.3 Appendix III

Expenditure on Land Improvement

Description and Rate of Depreciation DV (%)

PART I

FARMING AND AGRICULTURE

	%
(a) The eradication or extermination of animal or vegetable pests on the land	5
(b) The felling, clearing, destruction, and removal of timber, stumps, scrub or undergrowth on the land:	5
(c) The destruction of weeds or plants detrimental to the land:	5
(d) The preparation of the land for farming or agriculture, including the cultivation and grassing thereof, but excluding expenditure incurred in respect of any of the items specified in paragraph (b):	5
(e) The draining of swamp or low-lying lands:	5
(f) The construction of access roads or tracks to or on the land:	5
(g) The construction of dams, stopbanks, irrigation or stream diversion channels, or other improvements for the purpose of conserving or conveying water for use on the land or for preventing or combating soil erosion:	5
(h) The construction of earthworks, ponds, settling tanks, or other similar improvements primarily for the purpose of the treatment of waste products in order to prevent or combat pollution of the environment:	5
(i) The repair of flood or erosion damage:	5
(j) The sinking of bores or wells for the purpose of supplying water for the use on the land:	5
(k) The construction of aeroplane landing strips to facilitate aerial topdressing of the land:	5
(l) The planting of vines or trees on the land other than trees planted primarily and principally for the purpose of timber production:	10
(m) The construction on the land of fences, including the purchase of wire or wire netting for the purpose of making new or existing fences rabbit proof:	10
(n) The erection on the land of electric-power lines or telephone lines:	10
(o) The construction on the land of feeding platforms,	

feeding yards, plunge sheep dips, or self-feeding ensilage pits:	10
(p) The construction on the land of supporting frames for growing crops:	10
(q) The construction on the land of structures for shelter purposes.	10

PART II

FORESTRY

(a) The felling, clearing, destruction, or removal of timber, stumps, scrub, or undergrowth on the land in the preparation of the land for the planting of trees on the land:	5
(b) The eradication or extermination, to enable the planting of trees on the land, of animal or vegetable pests on the land:	5
(c) The destruction, to enable the planting of trees on the land, of weeds or plants detrimental to the land:	5
(d) The draining of swamp or low-lying lands in the preparation of the land for the planting of trees on the land:	5
(e) The construction of access tracks or roads to or on the land and any culverts or bridges that are necessary for the purposes of that construction:	5
(f) The construction of dams, stopbanks, irrigation or stream diversion channels, or other improvements for the purpose of conserving or conveying water for use on the land or for preventing or combating soil erosion:	5
(g) The repair of flood or erosion damage:	5
(h) The sinking of bores or wells for the purpose of supplying water for use on the land:	5
(i) The construction of aeroplane landing strips to facilitate aerial topdressing or disease control work or firefighting on the land:	5
(j) The construction on the land of fences, including the purchase of wire or wire netting for the purpose of making new or existing fences rabbit proof:	10
(k) The erection on the land of electric power lines or telephone lines:	10

PART III

ROCK OYSTER FARMING

- (a) The acquisition and preparation of spatting sticks; or 20
- (b) The construction and erection of posts, rails, or other structures for the holding of spatting sticks during spat catching and maturing; or 20
- (c) The construction of fences (including breakwater fences). 20

PART IV

MUSSEL FARMING

- (a) The acquisition, preparation, and mooring of pontoons, rafts, or other floating structures for collecting spat: 20
- (b) The acquisition, mooring, and outfitting of moored floating platforms or longlines from which the collected spat is suspended for subsequent growth: 20
- (c) The collecting and depositing of shell or other suitable material on the sea bed to create spatting surfaces. 20

PART V

SCALLOP FARMING

- (a) The acquisition, preparation, and mooring of floating structures for collecting spat: 20
- (b) The acquisition, mooring, and outfitting of longlines from which the collected spat is suspended for subsequent growth. 20

PART VI

SEA-CAGE SALMON FARMING

- (a) The acquisition, preparation, and mooring of pontoons, rafts, or other floating structures for securing or protecting cages or other containment vessels: 20
- (b) The acquisition, preparation, and placing of equipment of structures, including tanks, cages, nets, or other vessels, for the containment of live

salmon:	20
(c) The acquisition and placing of ropes and buoys used in the breeding or maturing of salmon.	20

PART VII

FRESHWATER FISH FARMING

(a) The drilling of water bores:	5
(b) The draining of land or the excavating of sites for ponds, tanks, or races:	5
(c) The construction or races, sluices, ponds, settling ponds, or tanks of impervious materials to conduct or contain waters:	5
(d) The supply and installation of pipes for water reticulation:	5
(e) The construction of walls, embankments, walkways, service paths, or access paths:	5
(f) The construction of effluent ponds:	5
(g) The supply and installation of baffles or screens for the containing or excluding of fish:	10
(h) The construction of fencing on the fish farm.	10

4.16.4. Appendix IV

Average Market Values of Livestock for the 1986 Income year

Type	Class	Average Market Value per head \$
Sheep	Ewe hoggets	12
	Ram and wether hoggets	12
	Two-tooth ewes	20
	Mixed-age ewes (3yr & 4yroid ewes)	12
	5yr & 6yr ewes	8
	Mixed-age wethers	10
	Breeding rams	120
Cattle	Beef breeds and beef crosses:	
	Rising 1yr heifers	200
	Rising 2yr & older heifers	
	(maiden/first calving)	400
	Mixed-age cows (2nd and subs. (calving)	340
	Rising 1yr steers & bulls	250
	Rising 2yr & older steers & bulls	600
	Breeding bulls	1,500
	Fresian and related breeds:	
	Rising 1yr heifers	200
	Rising 2yr & older heifers (maiden/first calving)	400

	Mixed-age cows (2nd and subs. (calving)	340
	Rising 1yr steers & bulls	250
	Rising 2yr & older steers & bulls	600
	Breeding bulls	1,500
	Jersey and other dairy breeds:	
	Rising 1yr heifers	200
	Rising 2yr & older heifers (maiden/first calving)	400
	Mixed-age cows (2nd & subs. (calving)	340
	Rising 1yr steers & bulls	250
	Rising 2yr & older steers & bulls	600
	Breeding bulls	1,500
Deer	Red deer:	
	Rising 1yr hinds	1,000
	Rising 2yr & older hinds (maiden/first fawning)	1,400
	Mixed-age hinds (2nd & subs. (fawning hinds)	1,200
	Rising 1yr stags	200
	Rising 2yr & older stags (non-breeding)	400
	Breeding stags	3,500
	Wapiti, Elk, and related crossbreds:	
	Rising 1yr hinds	1,500

Rising 2yr & older hinds (2nd & subs. fawning hinds)	2,100
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Mixed-age hinds (2nd & subs. fawning hinds)	\$1,800
--	---------

Rising 1yr stags	300
------------------	-----

Rising 2yr & older stags (non-breeding)	600
--	-----

Breeding stags	5,000
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Other breeds:

Rising one-year hinds	600
-----------------------	-----

Rising 2yr & older hinds (maiden/first fawning)	750
--	-----

Mixed-age hinds (2nd & subs. fawning hinds)	670
--	-----

Rising 1yr stags	135
------------------	-----

Rising 2yr & older stags (non-breeding)	250
--	-----

Breeding stags	1,000
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Goats Angora and Angora Crosses - Purebred and G1:

Rising 1yr does	1,000
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Rising 2yr does	1,800
-----------------	-------

Mixed-age does	1,800
----------------	-------

Rising 1yr bucks (non-breeding)/ wethers	1,000
---	-------

Bucks (non-breeding)/wethers over 1yr	1,000
--	-------

Breeding bucks	3,500
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Angora and Angora Crosses - G2 and G3:

Rising 1yr does	600
Rising 2yr does	700
Mixed-age does	700
Rising 1yr bucks (non-breeding)/ wethers	300
Bucks (non-breeding)/wethers over 1yr	300
Breeding bucks	700
Angora and Angora Crosses - G4:	
Rising 1yr does	360
Mixed-age does	530
Rising 1yr bucks (non-breeding)/ wethers	36
Bucks (non-breeding)/wethers over 1yr	36
Breeding bucks	2600
Other fibre and meat-producing goats:	
Rising 1yr does	150
Mixed-age does	300
Rising 1yr bucks (non-breeding)/ wethers	10
Bucks (non-breeding)/wethers over 1 yr	10
Breeding bucks	600
Milking (dairy) goats:	
Rising 1yr does	150
Does over 1yr	300

	Breeding bucks	600
	Other dairy goats	10
Pigs	Breeding sows less than 1yr of age	95
	Breeding sows over 1yr of age	110
	Breeding boars	130
	Weaners less than 10 wks of age (excluding sucklings)	30
	Growing pigs 10 to 17 wks of age (porkers/baconers)	75
	Growing pig over 17 wks of age (baconers)	95

SECTION 5

ESTATE AND GIFT DUTIES

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5.1 INTRODUCTION

Both estate duty and gift duty are levied under the Estate and Gift Duties Act 1968 as amended. Both are administered by the Inland Revenue Department.

5.2 ESTATE DUTY

5.2.1 Introduction

In broad terms, estate duty is a tax on the total value of property that was owned by a person who has died and that passes from one person to another because of that death.

The final balance of the estate is calculated as:

	Estate Assets
plus	Notional Estate
less	<u>Exempt Assets</u>
	Dutiable Estate
less	Allowable Debts
less	Matrimonial Home Allowance
less	<u>Charitable Allowance</u>

FINAL BALANCE

=====

Estate Duty is calculated as:

	Estate Duty (on final balance)
less	<u>Reliefs</u>

NET DUTY

=====

5.2.2 Property Liabile to Estate Duty

1. All property situated in New Zealand. (Property is used in the widest sense to cover all assets including land, cash, proceeds of life insurance policies, etc.)
2. All property outside New Zealand if the deceased was domiciled in New Zealand at the date of death. A credit is allowed in respect of estate duty paid overseas.

3. **"Notional Estate"**, being:

Dutiable gifts (i.e. gifts which are or may be liable to gift duty) made within 3 years of death. Gifts which are exempt from gift duty are also exempt from estate duty - refer section 5.3.3. Disposition of matrimonial property may also be exempt from gift duty - refer Section 5.3.4.

Gifts made before death where the donor has reserved an interest for his/her lifetime (i.e. gifts with strings attached).

Property disposed of before death where a benefit passes back to the estate upon his death.

The deceased's share or interest in any property held jointly, other than a joint family home.

Where all or part of the deceased's interest in a policy of life insurance on his/her life **has been disposed of to a relative** by the deceased within 3 years of death, a proportion of the gross benefits payable at death is included in the dutiable estate. This provision does not apply to a genuine disposition for full consideration to non-relatives.

The value to be included in the dutiable estate is calculated according to the following formula:

$$\frac{\text{Premiums up to disposition}}{\text{Total Premiums to death}} \times \text{Gross Proceeds} \times \text{Proportion of interest disposed of}$$

Allowance is then made for any consideration paid to the deceased when the policy was assigned.

Example:

Policy taken out by deceased in 1976. Annual premium \$200. Assigned by way of sale to his wife in 1984 for the surrender value of \$2,000. Deceased dies in 1986, and the policy realises \$5,500.

Amount to be included in the dutiable estate is:

$\frac{\text{Premiums to date of assignment}}{\text{Total premiums during term}}$	x	Proceeds	
= $\frac{(8 \times \$200)}{(10 \times \$200)}$	x	5,500	= \$4,400
less consideration paid on assignment			<u>2,000</u>
Amount to be included			<u>2,400</u>

If the deceased has continued to pay the premiums after assignment, then the annual premiums so paid would be treated as gifts within three years of death and included in the notional estate - see (a) above.

The value of any pensions payable to a survivor on the death of the deceased.

5.2.3 Exemptions

1. Non-dutiable gifts (see Section 5.3.3)
 - Small gifts not exceeding \$2000 to the same beneficiary per calendar year.
 - Maintenance or education of the family.
 - Gifts to charities.
 - Certain superannuation elections and/or payments by employers.
2. The first \$2,000 p.a. of any pension or annuity payable to the surviving spouse of the deceased from a group superannuation scheme.
3. The total of any such annuity payable to a child of the deceased until the child attains the age of twenty years.
4. Accrued War Pensions and Social Security benefits.
5. Personal chattels.
 - The total value of personal chattels which pass to the surviving spouse.
 - Up to \$6,000 for personal chattels which pass to other beneficiaries.
6. The deceased's share of a residence registered as a joint family home. (Applies to the estate of the first spouse to die.)

5.2.4 Allowable Debts

Debts which are owing by the deceased at the time of death may be deducted from the estate. It does not matter whether the debt was incurred in New Zealand, or overseas.

Reasonable funeral expenses and income tax on income to date-of-death are regarded as allowable debts. However, no allowance should be made for any expenses of administering the estate or remuneration of the executor(s).

The amount of any debt owing under any mortgage, charge, or other encumbrance over a joint family home is not an allowable debt.

5.2.5 Matrimonial Home Allowance

In the case of a matrimonial home, the allowance is in respect of the value of the family residence (i.e. the matrimonial home), or other property if the home does not pass to the surviving spouse. The allowance is restricted to one home only, and does not apply to a joint family home.

Value of the Allowance:

The value of the home where the matrimonial home passes to the surviving spouse; or where property other than the matrimonial home passes to the surviving spouse, the allowance is the lesser of:

- the value of the matrimonial home; or
- the value of the other property passing.

NOTE: All debts incurred in order to purchase the matrimonial home or equivalent property, irrespective of whether or not they are secured over that home or property will reduce the value of the matrimonial home allowance.

5.2.6 Charitable Allowance

Allowance is given for bequests made to charitable organisations.

The charitable allowance is the lesser of:

- The sum of all charitable successions, or
- \$25,000.

5.2.7 Valuation of Estate

All property included in the dutiable estate will be valued as at the date of death, except that gifts will be valued as at the date of gift. In general, the same principles apply to valuations for both estate duty and gift duty purposes. (Refer to section 5.3.2 - Valuation of Gift).

The value of land and buildings is determined by a special Government valuation, and specifically excludes the timber value of any growing trees. All other property should be valued by persons competent to value the assets concerned. However, it is not necessary to value personal chattels where they have all been exempted from duty. (Refer section 5.2.3.).

Special provisions apply regarding the valuation of annuities, pensions etc. for estate duty purposes, and care should be exercised in assessing such values. Calculation is necessary to establish the value of pensions etc. and reference must be made to the tables contained in the Second Schedule to the Estate and Gift Duty Act. There are four tables in all, and these refer to life expectancies for males and females, expectancy of widowhood for females of various ages, and financial factors for specific time periods. These are reproduced as Tables A,B,C, and D, respectively, in Appendix

II (section 5.4). Reference should be made to the Valuation of Succession (section 5.2.8) and to the Example of Estate Duty Assessment (section 5.2.12).

5.2.8 Valuation of Successions

The whole of the estate is divided into various successions (i.e. inheritances) as at the date of death, and each succession, whether it be property, an annuity, or some other future interest, must be valued. The general rules of valuation are outlined in section 5.2.7 (above). In calculating the value of each succession no deduction should be made for administration expenses, the administrators' commission or remuneration, the estate duty payable, or any mortgage or encumbrance where the beneficiary has a right to be reimbursed in respect of such charge. Also, it should be noted that where a matrimonial home allowance has been made, the succession of the surviving spouse is reduced by the amount of that allowance.

Valuation of Annuities, Life Interests, etc.

Where an annuity or some other form of future interest is involved, the value of each inheritance is calculated using the tables in Appendix II and the total estate then apportioned between the beneficiaries. Thus if a widow is to receive an annuity for the rest of her life, the value of that annuity is calculated (based on her life expectancy), and this value is the widow's succession; the balance goes to the remainderman. The combined total of the two equals the value of the estate.

An annuity is a fixed sum of money payable each year for a number of years or for life. An annuity may commence as at date of death, or some time thereafter, such as after a certain number of years or upon the happening of some specific event.

Example:

Son aged 45 is left an annuity of \$2,000 for life.

Value of his succession would be calculated as:

Present value of \$1 per annum for life of a male aged 45 (from Table A) is \$14.92971.

$$\begin{aligned}\text{Present value of \$2,000 pa} &= \$2,000 \times 14.92971 \\ &= \$29,859\end{aligned}$$

A life interest is the right to receive the income for life from a certain fund or specified assets, or to have the use of an asset for life. The successor entitled to this is the life tenant.

Example:

A dies on 18 November 19A3 leaving a final balance of \$100,000. Under his will his widow (age 63) receives income for life and on her death estate assets pass to surviving children.

Successions:

Widow: Present value of income on capital of \$1 for life of a female aged 63 (from Table B) is \$0.54800.

Present value of income on \$100,000 is \$54,800

Remainderman: Present value of interest \$45,200
\$100,000

Interests may terminate otherwise than on death. Common examples would include:

- Income from residue of estate during her widowhood. Table C should be used.
- Income from estate's farming activities to widow until the youngest child attains the age of 21. Table D should be used.
- Annuity of \$1,040 to son until he attains age of 25. Table D should be used.

Life interests under an estate must be valued in accordance with the deceased's entitlement as set out in the provisions of the will of the head estate. Where the entitlement of the life tenant is not ascertainable from that will, any unpaid income plus any surplus livestock at standard values should be added to the estate of the life tenant at his or her death.

5.2.9 Calculation of Estate Duty

Estate duty is assessed on the final balance of the estate at the rate set out in Appendix I (section 5.4). The allowable reliefs are then deducted in order to obtain the actual estate duty payable.

5.2.10 Reliefs

Reliefs are deducted from the estate duty assessed, where applicable. Available reliefs include the following:

Relief from Successive Estate Duties (i.e. Quick Succession)

If the estate of a deceased person includes property which was inherited within 5 years of death, relief from duty may be given in the second estate in order to reduce the effect of a double impact of estate duty.

The reduction is applied to the lesser of the duty payable on the particular property in the first and second estates. The reduction is graduated according to the period which has passed between the two dates of death, as shown in the following table.

Period between Death of Successor and Predecessor	Duty Reduced by
0 - 4 months	75%
4 - 8 months	60%
8 - 12 months	50%
1 - 2 years	40%
2 - 3 years	30%
3 - 4 years	20%
4 - 5 years	10%

Relief for Gift Duty Paid

Where gifts have been included in the notional estate, the gift duty paid plus interest at 3% p.a. from the date the gift duty was paid to the date of death, will be refunded to the person who paid it. If the donor (i.e. the deceased) paid the gift duty, the amount of gift duty refunded (excluding any interest) is included in his dutiable estate. The total refund under these circumstances is first applied towards the payment of any estate duty and then any excess is refunded to the administrator of the deceased donor's estate.

5.2.11 Assessment and Collection

The administrator must file an Administrators' Statement together with various supporting forms within six months after the grant of administration. The forms prescribed for filing are available from the Inland Revenue Department.

An assessment is issued immediately after the accounts are filed, but this assessment may be amended as a result of the Department's examination or from further information received. After any queries have been satisfied, the Department then certifies the final balance and that duty is, or is not, payable.

Once this notice of assessment has been issued, any estate duty payable should be paid within three months after which a penalty of 5% of the unpaid duty is imposed.

Interest at 5% p.a. is charged on the amount of duty unpaid after six months from the date of death. Interest at 5% p.a. is also charged on any unpaid penalty on estate duty calculated from the date the penalty became payable.

5.2.12 Example of Estate Duty Assessment

Mr Green died on 30 October 1986 and his estate included the following property (at market value):

Matrimonial home	\$ 165,000
Investments	84,000
Personal chattels	7,000
Cash at P.O.S.B.	3,250
Interest accrued at P.O.S.B.	50
Car and boat	30,000
Mortgage over son's farm	220,000
Interest accrued on mortgage	2,000

His liabilities were:

Mortgage over matrimonial home	15,000
Accounts payable	1,300
Income tax assessed to date of death	1,400
Funeral expenses	1,200

In May 1963, Green took out a policy of life assurance which has annual premiums of \$300. In June 1983 he sold a half interest in the policy to his wife for \$7,000 which was half the then surrender value. Green continued to pay the premium until his death. The gross proceeds of this policy at death were \$20,000. Green also had a second insurance policy which had a death cover of \$100,000.

Green had also contributed to a superannuation scheme which, on his death, would provide his widow with \$5,000 per annum for the remainder of her life.

In addition, Green had forgiven debts to his son as follows:

1 January 1985	\$30,000	1 January 1986	\$30,000
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Gift duty of \$150 and \$150 respectively, had been paid by Green's son. (Refer to section 5.3.5, Calculation of Gift Duty.)

In his will, Green made the following bequests:

To son John, aged 25, debt forgiven	\$50,000
To daughter Sue, aged 19, cash	\$80,000
To St John Ambulance Association	\$ 5,000
To wife Alice, aged 65 - the residue of the estate.	

The final balance on which duty would be assessed is calculated as follows:

<u>Estate Assets:</u>	\$	\$
Matrimonial home	165,000	
Investments	84,000	
Personal chattels	7,000 (1)	
P.O.S.B. - cash plus accrued interest	3,300	
Car and boat	30,000	
Mortgage and accrued interest	222,000	
Proceeds of insurance policy		
- no. 1	10,000 (2)	
- no. 2	<u>100,000</u>	
		621,000
 <u>plus Notional Estate:</u>		
Dutiable gifts to son	60,000 (3)	
Interest in life policy disposed of	1,696 (4)	
Superannuation payable to widow	<u>30,908 (5)</u>	
		<u>92,604</u>
		713,604
 <u>less Exempt Assets:</u>		
Personal chattels to widow	(1)	<u>7,000</u>
		706,604
 <u>less Allowable Debts:</u>		
Mortgage over home	15,000	
Accounts payable	1,300	
Income tax	1,400	
Funeral expenses	<u>1,200</u>	
	18,900	
 <u>Matrimonial Home Allowance</u>		
Matrimonial Home	165,000	
less Mortgage	<u>15,000</u>	
	150,000	
 <u>Charitable Allowance</u>		
Value of bequest	<u>5,000</u>	
		<u>173,900</u>
 FINAL BALANCE		\$532,704 =====

Value of Successions:

Final balance of estate	\$532,704
Matrimonial Home Allowance	150,000
Charitable Allowance	<u>5,000</u>

Net Value of the Estate	\$687,704
	=====

Successions:

Son (John)

Gifts	60,000 (3)	
Bequest	<u>50,000</u>	110,000

Daughter (Sue)		
Bequest		80,000

St John Ambulance Association		5,000
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Widow (Mrs Alice Green)		<u>492,704</u>
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Net Value of the Estate		<u>\$687,704</u>
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ESTATE DUTY CALCULATION:

Estate duty on final balance		33,081.60
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less Reliefs:

Credit for gift duty paid: (6)		
Duty on gift dated 1 Jan 1983	250.00	
plus interest @ 3% on \$250 for 2		
years 302 days	<u>21.19</u>	

		<u>271.19</u>
--	--	---------------

NET ESTATE DUTY PAYABLE

	\$ 32810.41
	=====

NOTES:

1. The value of personal chattels passing to the widow is totally exempt from estate duty. Thus the \$7,000 could be omitted from the calculation.
2. Green had sold a half interest in the insurance policy to his wife in 1980, so only half the proceeds belong to the estate.
3. Only dutiable gifts made within 3 years of death are included.
4. Green's interest in the life policy is calculated as:

$$\frac{20 \times 300}{23 \times 300} \times 50\% \text{ of } \$20,000 = \$8,696$$

less consideration received	<u>7,000</u>
Amount included as notional estate	<u>\$1,696</u>

5. The value is calculated as:

Superannuation to widow	\$5,000 p.a.
less exemption	<u>2,000 p.a.</u>

Dutiable \$3,000 p.a.

Life expectancy for a female aged 65 is 14.84 years. and the present value of \$1 p.a. for her life is \$10.3027 (from Table B). The value of the superannuation is therefore calculated as:

$$\$3,000 \times 10.3027 = \$30,908.$$

6. The gift duty paid is not included in the notional estate as it was paid by the son. The estate, however, does receive a credit for the gift duty paid to be offset against the estate duty payable. Similarly the interest due by the Crown on the gift duty paid, although strictly payable to the son, will be offset against the estate duty payable. The estate should account to the son, John, for these accounts.

5.3 GIFT DUTY

5.3.1 Definitions

A gift is any disposition of property made otherwise than by will, without fully adequate consideration in money or money's worth passing to the donor (the person making the gift).

"Disposition of property" is used in its widest sense to cover any alienation of property, such as any conveyance, transfer, settlement or assignment, including transactions which diminish the value of one estate to the betterment of another. It includes all gifts of property in New Zealand and all gifts of foreign property if the owner is domiciled in New Zealand.

"Consideration" is what one party in a transaction gives to the other party. The most common form is money, but it could be a promise to do or not to do something, or another form of property. Whatever form is involved, its value is calculated in monetary terms.

5.3.2 Valuation of Gift

The value of a gift is the monetary value of the property gifted less any consideration paid. The value of land and buildings is determined by agreement between the donor and the Commissioner of Inland Revenue, or by the Valuer-General. All other property is at market value as assessed by a competent valuer.

Date of Valuation

A gift (and any consideration) is valued as at the date the gift is made, which is taken to mean the date at which the donor has put himself in the position where the gift cannot be revoked (i.e. the gift is complete).

The completion dates of some of the more common forms of gift are illustrated in the following chart:

Description of Gift	When Complete
Cash	On delivery to the beneficiary.
Cheques	When the cheque has been cashed. (Until then it can be revoked.)
Land	Except where a valid trust is created, the earlier of the dates on which - (a) the instrument of transfer is registered in the Land Transfer Office; or

(b) the beneficiary has possession of all the necessary documents to enable the registration to be effected.

Shares

As for land, except that the instrument of transfer is registered by the company.

Chattels Where there has been effective

delivery of the chattels or there has been a deed of assignment.

Release and
forgiveness of debt

Normally the execution of a legally effective deed of release or forgiveness will be required.

5.3.3 Exemptions from Gift Duty

A dutiable gift is any gift which is or may be liable to gift duty. However, certain gifts are specifically excluded from gift duty, and include:

1. Small gifts, not exceeding an aggregate of \$2,000 (\$1,000 between 1 January 1979 and 1 April 1984) to the same beneficiary in the same calendar year, are not taken into account if they are made in good faith as part of the normal expenditure of the donor.
2. Gifts made towards the maintenance or education of a relative provided the gift is not excessive having regard to the obligation of the donor.
3. Gifts made to charitable bodies.
4. Special exemptions including:
 - certain superannuation elections.
 - contributions by an employer to superannuation fund.
 - certain gratuitous payments from employer to employee.
 - settlement of a joint family home.

5.3.4 Dispositions of Matrimonial Property

Since 28 July 1983 one spouse may transfer up to 50% of the matrimonial property to the other spouse under Section 21 of the Matrimonial Property Act 1976, without giving rise to a liability for gift duty or estate duty at the time of transfer. Duty will be payable on the value of property which exceeds a 50% share. Transfers of matrimonial assets made by Court Order under Section 25 of the Matrimonial Property Act 1976 are totally exempt.

A copy of the agreement which involves the disposition of matrimonial property must be delivered to the Commissioner within 3 months of the date of disposition.

Example

Before entering into an agreement to dispose of matrimonial property under Section 21 of the Matrimonial Property Act 1976, property was held as follows:

Husband	-	Farm	\$300,000
	-	Shares	20,000
	-	Bank Account	10,000
Wife	-	Bank Account	\$ 15,000

On 30 November 1985, the couple decided to share ownership of the matrimonial property on a 50:50 basis, and executed an agreement to that effect.

The farm and shares would be regarded as matrimonial property, whereas the two bank accounts would be regarded as separately owned assets.

The end result of the transfers would be:

Husband	-	Bank Account	\$ 10,000
	-	Farm (half share)	150,000
	-	Shares (half share)	10,000
Wife	-	Bank Account	\$ 15,000
	-	Farm (half share)	150,000
	-	Shares (half share)	10,000

The wife, as transferee, does not hold more than 50% of the matrimonial property after the transfer. Accordingly, there is no liability for gift duty.

It should be noted that this exemption does not apply to transfers of "separate" property. Any such transfers will still be regarded as gifts.

5.3.5 Calculation of Gift Duty

As from 1 April 1984, gift duty does not become payable until the value of any dutiable gifts over any twelve month period exceeds \$27,000 in total value. (Between 21 June 1979 and 31 March 1984 (inclusive), gift duty did not become payable until the aggregated value exceeded \$15,000). Rates of Gift Duty are detailed in Appendix III (section 5.4).

If more than one dutiable gift is made within a twelve month period, the duty is apportioned to each dutiable gift involved in accordance with the following formula:

$$\frac{a}{b} \times c$$

where: (a) is the value of the dutiable gift.

(b) is the total value of this gift and all other dutiable gifts made within twelve months.

(c) is the amount of gift duty payable on item (b).

It should be noted that the 12 month period is chosen so as to maximise the amount of gift duty payable.

5.3.6 Aggregation of Gifts

It is important to note that although gift duty is charged on each individual dutiable gift, the rate of gift duty charged on any such individual gift depends upon the aggregation of the value of all dutiable gifts made at the same time or within twelve months subsequently or previously by the same donor (not being a gift exempted from duty, e.g. to a charity). The day the gift is made is included in the twelve month period, so that gifts completed on the same day each year cannot be aggregated. Furthermore, all dutiable gifts are aggregated, irrespective of the identity of the recipient (donee).

Example 1:

Gift to A of \$20,000 made on 1 August 1985.

Gift to B of \$15,000 made on 31 July 1986.

These gifts would be aggregated and be liable to gift duty of \$400, even though each gift is below the exemption level of \$27,000. Note that if the gift to B was made on 1 August 1985, no aggregation would occur as the gifts are not within a twelve month period.

Example 2:

Gift to C of \$30,000 made on 1 August 1985 - duty of \$150 paid.

Gift to D of \$15,000 made on 1 January 1986.

These gifts would be aggregated and duty of \$1,350 on the sum of \$45,000 would be payable, less the \$150 already paid.

5.3.7 Assessment and Collection

If the value of a gift exceeds \$12,000 or if the aggregated value of this gift and all other gifts made over the previous twelve months exceeds \$12,000, a Gift Statement (form IR 635) must be delivered to the Commissioner by the donor within three months of making the gift.

A gift statement must always be filed where property is settled under a matrimonial property agreement - refer Section 5.3.4.

If the donor fails to deliver the Gift Statement within the specified time, the donee has an extra month to do so.

If gift duty remains unpaid within six months of making a dutiable gift, a penalty of 5% will be added to the unpaid duty.

Interest at 5% p.a. on the duty payable, and subsequently on any penalty levied, will be added to any duty unpaid within three months of making a dutiable gift.

The donor is primarily liable to pay gift duty, but the Inland Revenue can obtain payment from the donee. Unless the terms of the gift provide otherwise, the donee is entitled to recover such duty paid from the donor.

5.3.8 Example of Gift Duty Assessment:

Gift made to D on 14 August 1985 of \$22,000

Gift made to E on 18 November 1985 of \$22,000

Gift made to F on 31 October 1986 of \$35,000

Duty assessment is as follows:

14 August 1985

Gift duty payable on gift of \$22,000 to D is zero.

18 November 1985

Gift duty payable on total gifts for previous 12 months (\$44,000) is \$1,250.00

The duty of \$1250 would be apportioned in the following manner:

$$\text{Gift to D: } \frac{22,000}{44,000} \times 1250 = \$625.00$$

$$\text{Gift to E } \frac{22,000}{44,000} \times 1250 = \$625.00$$

31 October 1986

Gift duty payable on total gifts for previous 12 months (\$57,000) is \$2,850.

The duty of \$2,850 would be apportioned as follows:

$$\text{Gift to E: } \frac{22,000}{57,000} \times 2850 = \$1100.00$$

$$\begin{array}{r} \text{less duty already paid} \\ \text{DUTY PAYABLE} \end{array} \quad \begin{array}{r} \$625.00 \\ \$475.00 \end{array}$$

$$\text{Gift to F: } \frac{35,000}{57,000} \times 2850 = \$1750.00$$

Total gift duty payable is:-

$$\begin{array}{r} \text{Gift to D} \\ \text{Gift to E } (625 + 475) \\ \text{Gift to F} \end{array} \quad \begin{array}{r} \$625 \\ \$1100 \\ \underline{\$1750} \\ \$3475 \\ \text{===} \end{array}$$

5.4 APPENDICES

APPENDIX I.

Rates of Estate Duty

PART A

PERSONS DYING BEFORE 1 APRIL 1983 AND 31 MARCH 1984 (inclusive)

Final Balance		Rate of Duty
Up to	\$350,000	Nil
Over	\$350,000	40% of excess over \$350,000

PART B

PERSONS DYING ON OR AFTER 1 APRIL 1984

Final Balance		Rate of Duty
Up to	\$450,000	Nil
Over	\$450,000	40% of excess over \$450,000

APPENDIX II

TABLES FOR VALUATION OF PENSIONS ETC.

Table A

**Present Value of Annuity or Other Interest for Life
of MALE or Expectant on Death of MALE**

Years of Age	Expectation of Life of Male	Present Value of \$1 per Annum	Present Value of \$1 Payable on Death	Present Value of Income on Capital of \$1 for Life
	Years	\$	\$	\$
0	68.29	19.28531	0.03573	0.96427
1	69.03	19.31080	0.03446	0.96554
2	68.17	19.28117	0.03594	0.96406
3	67.27	19.24885	0.03756	0.96244
4	66.33	19.21357	0.03932	0.96068
5	65.39	19.17665	0.04117	0.95883
6	64.44	19.13758	0.04312	0.95688
7	63.48	19.09622	0.04519	0.95481
8	62.53	19.05334	0.04733	0.95267
9	61.56	19.00747	0.04963	0.95037
10	60.60	18.95988	0.05201	0.94799
11	59.63	18.90948	0.05453	0.94547
12	58.66	18.85664	0.05717	0.94283
13	57.69	18.80124	0.05994	0.94006
14	56.74	18.74441	0.06278	0.93722
15	55.79	18.68488	0.06576	0.93424
16	54.86	18.62391	0.06880	0.93120
17	53.92	18.55941	0.07203	0.92797
18	53.00	18.49340	0.07533	0.92467
19	52.07	18.42335	0.07883	0.92117
20	51.15	18.35084	0.08246	0.91754
21	50.23	18.27503	0.08625	0.91375
22	49.32	18.19663	0.09017	0.90983
23	48.40	18.11378	0.09431	0.90569
24	47.48	18.02716	0.09864	0.90136
25	46.56	17.93660	0.10317	0.89683

Years of Age	Expectation of Life of Male	Present Value of \$1 per Annum	Present Value of \$1 Payable on Death	Present Value of Income on Capital of \$1 for Life
	Years	\$	\$	\$
26	45.63	17.84085	0.10796	0.89204
27	44.70	17.74068	0.11297	0.88703
28	43.76	17.63473	0.11826	0.88174
29	42.83	17.52505	0.12375	0.87625
30	41.89	17.40904	0.12955	0.87045
31	40.96	17.28896	0.13555	0.86445
32	40.03	17.16314	0.14184	0.85816
33	39.10	17.03125	0.14844	0.85156
34	38.17	16.89325	0.15534	0.84466
35	37.24	16.74887	0.16256	0.83744
36	36.32	16.59947	0.17003	0.82997
37	35.40	16.44326	0.17784	0.82216
38	34.48	16.27992	0.18600	0.81400
39	33.57	16.11105	0.19445	0.80555
40	32.65	15.93259	0.20337	0.79663
41	31.74	15.74811	0.21259	0.78741
42	30.83	15.55535	0.22223	0.77777
43	29.92	15.35394	0.23230	0.76770
44	29.02	15.14570	0.24271	0.75729
45	28.13	14.92971	0.25351	0.74649
46	27.25	14.70681	0.26466	0.73534
47	26.38	14.47697	0.27615	0.72385
48	25.52	14.24019	0.28799	0.71201
49	24.67	13.99650	0.30018	0.69982
50	23.83	13.74593	0.31270	0.68730
51	23.00	13.48857	0.32557	0.67443
52	22.18	13.22161	0.33892	0.66108
53	21.38	12.95106	0.35245	0.64755
54	20.59	12.67399	0.36630	0.63370
55	19.82	12.39437	0.38028	0.61972
56	19.06	12.10793	0.39460	0.60540
57	18.32	11.81622	0.40919	0.59081
58	17.60	11.52338	0.42383	0.57617
59	16.89	11.22607	0.43870	0.56130

Years of Age	Expectation of Life of Male	Present Value of \$1 per Annum	Present Value of \$1 Payable on Death	Present Value of Income on Capital of \$1 for Life
	Years	\$	\$	\$
60	16.19	10.92067	0.45397	0.54603
61	15.50	10.60871	0.46959	0.53044
62	14.82	10.29307	0.48535	0.51465
63	14.16	9.97560	0.50122	0.49878
64	13.52	9.65621	0.51719	0.48281
65	12.90	9.34054	0.53297	0.46703
66	12.29	9.01705	0.54915	0.45085
67	11.71	8.70177	0.56491	0.43509
68	11.14	8.38437	0.58078	0.41922
69	10.59	8.06670	0.59666	0.40334
70	10.05	7.75097	0.61245	0.38755
71	9.53	7.43320	0.62834	0.37166
72	9.01	7.11396	0.64430	0.35570
73	8.51	6.79196	0.66040	0.33960
74	8.03	6.48255	0.67587	0.32413
75	7.57	6.17217	0.69139	0.30861
76	7.13	5.87436	0.70628	0.29372
77	6.71	5.58028	0.72099	0.27901
78	6.31	5.29600	0.73520	0.26480
79	5.92	5.01599	0.74920	0.25080
80	5.55	4.73990	0.76300	0.23700
81	5.19	4.47126	0.77644	0.22356
82	4.84	4.20411	0.78979	0.21021
83	4.51	3.94555	0.80272	0.19728
84	4.19	3.69482	0.81526	0.18474
85	3.89	3.45545	0.82723	0.17277
86	3.60	3.21687	0.83916	0.16084
87	3.33	2.99474	0.85026	0.14974
88	3.07	2.78084	0.86096	0.13904
89	2.83	2.57640	0.87118	0.12882
90	2.60	2.37771	0.88111	0.11889

Years of Age	Expectation of Life of Male	Present Value of \$1 per Annum	Present Value of \$1 Payable on Death	Present Value of Income on Capital of \$1 for Life
	Years	\$	\$	\$
91	2.39	2.19631	0.89018	0.10982
92	2.19	2.02354	0.89882	0.10118
93	2.01	1.86805	0.90660	0.09340
94	1.84	1.71429	0.91429	0.08571
95	1.68	1.56916	0.92154	0.07846
96	1.53	1.43311	0.92834	0.07166
97	1.39	1.30612	0.93469	0.06531
98	1.27	1.19728	0.94014	0.05986
99	1.15	1.08844	0.94558	0.05442
100	1.05	0.99773	0.95011	0.04989

Table B

**Present Value of Annuity or Other Interest for Life
of FEMALE or Expectant on Death of FEMALE**

Years of Age	Expectation of Life of Female	Present Value of \$1 per Annum	Present Value of \$1 Payable on Death	Present Value of Income on Capital of \$1 for Life
	Years	\$	\$	\$
0	72.43	19.41600	0.02920	0.97080
1	72.90	19.42934	0.02853	0.97147
2	72.05	19.40521	0.02974	0.97026
3	71.12	19.37756	0.03112	0.96888
4	70.18	19.34831	0.03258	0.96742
5	69.23	19.31737	0.03413	0.96587
6	68.26	19.28427	0.03579	0.96421
7	67.30	19.24994	0.03750	0.96250
8	66.33	19.21357	0.03932	0.96068
9	65.35	19.17505	0.04125	0.95875
10	64.37	19.13464	0.04327	0.95673
11	63.39	19.09226	0.04539	0.95461
12	62.41	19.04779	0.04761	0.95289
13	61.42	19.00067	0.04997	0.95003
14	60.44	18.95172	0.05241	0.94759
15	59.47	18.90092	0.05495	0.94505
16	58.50	18.84765	0.05762	0.94238
17	57.53	18.79180	0.06041	0.93959
18	56.56	18.73325	0.06334	0.93666
19	55.60	18.67252	0.06637	0.93363
20	54.64	18.60887	0.06956	0.93044
21	53.67	18.54147	0.07293	0.92707
22	52.71	18.47156	0.07642	0.92358
23	51.75	18.39830	0.08008	0.91992
24	50.79	18.32154	0.08392	0.91608
25	49.83	18.24110	0.08795	0.91205
26	48.87	18.15682	0.09216	0.90784
27	47.92	18.06947	0.09653	0.90347
28	46.96	17.97698	0.10115	0.89885
29	46.01	17.88108	0.10595	0.89405

Years of Age	Expectation of Life of Female	Present Value of \$1 per Annum	Present Value of \$1 Payable on Death	Present Value of Income on Capital of \$1 for Life
	Years	\$	\$	\$
31	44.11	17.67502	0.11625	0.88375
32	43.16	17.56461	0.12177	0.87823
33	42.21	17.44898	0.12755	0.87245
34	41.26	17.32787	0.13361	0.86639
35	40.32	17.20238	0.13988	0.86012
36	39.38	17.07102	0.14645	0.85355
37	38.44	16.93352	0.15332	0.84668
38	37.50	16.78959	0.16052	0.83948
39	36.57	16.64058	0.16797	0.83203
40	35.64	16.48470	0.17576	0.82424
41	34.71	16.32162	0.18392	0.81608
42	33.79	16.15293	0.19235	0.80765
43	32.88	15.97856	0.20107	0.79893
44	31.97	15.79638	0.21018	0.78982
45	31.06	15.60540	0.21973	0.78072
46	30.17	15.40991	0.22950	0.77050
47	29.29	15.20817	0.23959	0.76041
48	28.41	14.99774	0.25011	0.74989
49	27.54	14.78078	0.26096	0.73904
50	26.68	14.55732	0.27213	0.72787
51	25.82	14.32456	0.28377	0.71623
52	24.98	14.08804	0.29560	0.70440
53	24.14	13.83998	0.30800	0.69200
54	23.31	13.58470	0.32077	0.67923
55	22.49	13.32253	0.33387	0.66613
56	21.67	13.05019	0.34749	0.65251
57	20.87	12.77449	0.36128	0.63872
58	20.08	12.49093	0.37545	0.62455
59	19.30	12.19839	0.39008	0.60992
60	18.53	11.89933	0.40503	0.59497

Years of Age	Expectation of Life of Female	Present Value of \$1 per Annum	Present Value of \$1 Payable on Death	Present Value of Income on Capital of \$1 for Life
	Years	\$	\$	\$
61	17.77	11.59402	0.42030	0.57970
62	17.02	11.28238	0.43588	0.56412
63	16.28	10.95993	0.45200	0.54800
64	15.56	10.63620	0.46819	0.53181
65	14.84	10.30270	0.48487	0.51513
66	14.14	9.96598	0.50170	0.49830
67	13.45	9.62085	0.51896	0.48104
68	12.77	9.27160	0.53642	0.46358
69	12.11	8.92159	0.55392	0.44608
70	11.46	8.56256	0.57187	0.42813
71	10.83	8.20702	0.58965	0.41035
72	10.22	7.85036	0.60748	0.39252
73	9.63	7.49459	0.62527	0.37473
74	9.07	7.15080	0.64246	0.35754
75	8.53	6.80486	0.65976	0.34024
76	8.01	6.46966	0.67652	0.32348
77	7.52	6.13833	0.69308	0.30692
78	7.05	5.82022	0.70899	0.29101
79	6.59	5.49499	0.72525	0.27475
80	6.16	5.18940	0.74053	0.25947
81	5.74	4.88168	0.75592	0.24408
82	5.34	4.58319	0.77084	0.22916
83	4.96	4.29814	0.78509	0.21491
84	4.59	4.00823	0.79959	0.20041
85	4.24	3.73400	0.81330	0.18670
86	3.91	3.47191	0.82640	0.17360
87	3.60	3.21687	0.83916	0.16084
88	3.31	2.97829	0.85109	0.14891
89	3.04	2.75616	0.86219	0.13781
90	2.78	2.53320	0.87334	0.12666

Years of Age	Expectation of Life of Female	Present Value of \$1 per Annum	Present Value of \$1 Payable on Death	Present Value of Income on Capital of \$1 for Life
	Years	\$	\$	\$
91	2.54	2.32588	0.88371	0.11629
92	2.32	2.13584	0.89321	0.10679
93	2.12	1.96307	0.90185	0.09815
94	1.93	1.79592	0.91020	0.08980
95	1.75	1.63265	0.91837	0.08163
96	1.59	1.48753	0.92562	0.07438
97	1.45	1.36054	0.93197	0.06803
98	1.31	1.23356	0.93832	0.06168
99	1.19	1.12472	0.94376	0.05624
100	1.07	1.01587	0.94921	0.05079

Years of Age	Expectation of Life of Female	Present Value of \$1 per Annum	Present Value of \$1 Payable on Death	Present Value of Income on Capital of \$1 for Life
	Years	\$	\$	\$
91	2.54	2.32588	0.88371	0.11629
92	2.32	2.13584	0.89321	0.10679
93	2.12	1.96307	0.90185	0.09815
94	1.93	1.79592	0.91020	0.08980
95	1.75	1.63265	0.91837	0.08163
96	1.59	1.48753	0.92562	0.07438
97	1.45	1.36054	0.93197	0.06803
98	1.31	1.23356	0.93832	0.06168
99	1.19	1.12472	0.94376	0.05624
100	1.07	1.01587	0.94921	0.05079

Table C

**Present Value of Annuity or Other Interest for Widowhood
or Expectant on Termination of Widowhood**

Years of Age	Expectation of Widowhood	Present Value of \$1 per Annum For Widowhood	Present Value of \$1 Payable on Termin- ation of Widowhood	Present Value of Income on Capital of \$1 for Widowhood
Years		\$	\$	\$
Up to 20	7.5	6.12479	0.69376	0.30624
21	8.2	6.59213	0.67039	0.32961
22	8.9	7.04336	0.64783	0.35217
23	9.8	7.59895	0.62005	0.37995
24	10.7	8.13101	0.59344	0.40656
25	11.5	8.58483	0.57076	0.42924
26	12.2	8.96931	0.55153	0.44847
27	12.8	9.28751	0.53562	0.46438
28	13.3	9.54509	0.52275	0.47725
29	13.7	9.74712	0.51264	0.48736
30	14.1	9.94674	0.50266	0.49734
31	14.4	10.09104	0.49545	0.50455
32	14.9	10.33156	0.48342	0.51658
33	15.3	10.51709	0.47415	0.52585
34	15.8	10.74614	0.46269	0.53731
35	16.3	10.96866	0.45157	0.54843
36	16.9	11.23044	0.43848	0.56152
37	17.6	11.52338	0.42383	0.57617
38	18.2	11.76874	0.41156	0.58844
39	18.8	12.00617	0.39969	0.60031
40	19.5	12.27376	0.38631	0.61369
41	20.3	12.56989	0.37151	0.62849
42	20.9	12.78526	0.36074	0.63926
43	21.4	12.95789	0.35211	0.64789
44	21.8	13.09463	0.34527	0.65473

Years of Age	Expectation of Widowhood	Present Value of \$1 per Annum For Widowhood	Present Value of \$1 Payable on Termination of Widowhood	Present Value of Income on Capital of \$1 for Widowhood
Years		\$	\$	\$
45	22.0	13.16300	0.34185	0.65815
46	22.1	13.19556	0.34022	0.65978
47	22.2	13.22811	0.33859	0.66141
48	22.2	13.22811	0.33859	0.66141
49	22.1	13.19556	0.34022	0.65978
50	22.0	13.16300	0.34185	0.65815
51	21.8	13.09463	0.34527	0.65473
52	21.6	13.02626	0.34869	0.65131
53	21.3	12.92370	0.35381	0.64619
54	20.9	12.78526	0.36074	0.63926
55	20.5	12.64168	0.36792	0.63208
56	20.0	12.46221	0.37689	0.62311
57	19.6	12.31145	0.38443	0.61557
58	19.1	12.12301	0.39385	0.60615
59	18.5	11.88745	0.40563	0.59437
60	18.0	11.68959	0.41552	0.58448
61	17.4	11.44028	0.42799	0.57201
62	16.8	11.18681	0.44066	0.55934
63	16.1	10.88140	0.45593	0.54407
64	15.4	10.56290	0.47186	0.52814
65	14.6	10.18725	0.49064	0.50936

For widows 66 years of age or over, the expectations of life and widowhood are deemed to be identical, and Table B applies for both purposes.

Table D

**Present Value of Annuity or Other Interest for Period
Other Than Life or Expectant on Event Other Than Death**

Years	Present Value of \$1 per Annum for Period	Present Value of \$1 Payable After Period	Present Value of Income on Capital of \$1 for Period
	\$	\$	\$
1	0.95238	0.95238	0.04762
2	1.85941	0.90703	0.09297
3	2.72325	0.86384	0.13616
4	3.54595	0.82270	0.17730
5	4.32948	0.78353	0.21647
6	5.07569	0.74622	0.25378
7	5.78637	0.71068	0.28932
8	6.46321	0.67684	0.32316
9	7.10782	0.64461	0.35539
10	7.72173	0.61391	0.38609
11	8.30641	0.58468	0.41532
12	8.86325	0.55684	0.44316
13	9.39357	0.53032	0.46968
14	9.89964	0.50507	0.49493
15	10.37966	0.48102	0.51898
16	10.83777	0.45811	0.54189
17	11.27407	0.43630	0.56370
18	11.68959	0.41552	0.58448
19	12.08532	0.39573	0.60427
20	12.46221	0.37689	0.62311
21	12.82115	0.35894	0.64106
22	13.16300	0.34185	0.65815
23	13.48857	0.32557	0.67443
24	13.79864	0.31007	0.68993
25	14.09394	0.29530	0.70470

Years	Present Value of \$1 per Annum for Period	Present Value of \$1 Payable After Period	Present Value of Income on Capital of \$1 for Period
	\$	\$	\$
26	14.37518	0.28124	0.71876
27	14.64303	0.26785	0.73215
28	14.89813	0.25509	0.74491
29	15.14107	0.24295	0.75705
30	15.37245	0.23138	0.76862
31	15.59281	0.22036	0.77964
32	15.80268	0.20987	0.79013
33	16.00255	0.19987	0.80013
34	16.19290	0.19035	0.80965
35	16.37419	0.18129	0.81871
36	16.54685	0.17266	0.82734
37	16.71129	0.16444	0.83556
38	16.86789	0.15661	0.84339
39	17.01704	0.14915	0.85085
40	17.15909	0.14205	0.85795
41	17.29437	0.13528	0.86472
42	17.42321	0.12884	0.87116
43	17.54591	0.12270	0.87730
44	17.66277	0.11686	0.88314
45	17.77407	0.11130	0.88870
46	17.88007	0.10600	0.89400
47	17.98101	0.10095	0.89905
48	18.07716	0.09614	0.90386
49	18.16872	0.09156	0.90844
50	18.25592	0.08720	0.91280
51	18.33898	0.08305	0.91695
52	18.41807	0.07910	0.92090
53	18.49340	0.07533	0.92467
54	18.56514	0.07174	0.92826
55	18.63347	0.06833	0.93167

Years	Present Value of \$1 per Annum for Period	Present Value of \$1 Payable After Period	Present Value of Income on Capital of \$1 for Period
	\$	\$	\$
56	18.69854	0.06507	0.93493
57	18.76052	0.06197	0.93803
58	18.81954	0.05902	0.94098
59	18.87575	0.05621	0.94379
60	18.92929	0.05354	0.94646
61	18.98027	0.05099	0.94901
62	19.02883	0.04856	0.95144
63	19.07508	0.04625	0.95375
64	19.11912	0.04404	0.95596
65	19.16107	0.04195	0.95805
66	19.20102	0.03995	0.96005
67	19.23907	0.03805	0.96195
68	19.27530	0.03623	0.96377
69	19.30981	0.03451	0.96549
70	19.34268	0.03287	0.96713
71	19.37398	0.03130	0.96870
72	19.40379	0.02981	0.97019
73	19.43218	0.02839	0.97161
74	19.45922	0.02704	0.97296
75	19.48497	0.02575	0.97425
76	19.50949	0.02453	0.97547
77	19.53285	0.02336	0.97664
78	19.55510	0.02225	0.97775
79	19.57628	0.02119	0.97881
80	19.59646	0.02018	0.97982
81	19.61568	0.01922	0.98078
82	19.63398	0.01830	0.98170
83	19.65141	0.01743	0.98257
84	19.66801	0.01660	0.98340
85	19.68382	0.01581	0.98419

Years	Present Value of \$1 per Annum for Period	Present Value of \$1 Payable After Period	Present Value of Income on Capital of \$1 for Period
	\$	\$	\$
86	19.69887	0.01506	0.98494
87	19.71321	0.01434	0.98566
88	19.72687	0.01366	0.98634
89	19.73987	0.01301	0.98699
90	19.75226	0.01239	0.98761
91	19.76406	0.01180	0.98820
92	19.77529	0.01124	0.98876
93	19.78599	0.01070	0.98930
94	19.79618	0.01019	0.98981
95	19.80589	0.00971	0.99029
96	19.81513	0.00924	0.99076
97	19.82394	0.00880	0.99120
98	19.83232	0.00838	0.99162
99	19.84030	0.00798	0.99202
100	19.84791	0.00760	0.99249

Appendix III

RATES OF GIFT DUTY

GIFTS MADE ON OR AFTER 1 APRIL 1984

Value of Dutiable Gifts Made Within 12 months	Amount and Rate of Duty
<hr/>	
\$	\$
1 - 27,000	Nil
27,001 - 36,000	0 plus 5% of excess over \$27,000
36,001 - 54,000	450 plus 10% of excess over \$36,000
54,001 - 72,000	2,250 plus 20% of excess over \$54,000
Over \$72,000	5,850 plus 25% of excess over \$72,000

SECTION 6

INDEX

A

Access crossings, borderdyke irrigation - cost of.....	2- 93
Accessories , electric fencing - cost of.....	2-126
, farm machinery - cost of.....	2-162
, shearing plant - cost of.....	2- 32
Accident Compensation Levy.....	2- 27
Accident (personal), insurance.....	2-193
Accountancy Fees.....	2-200
Administration expenses.....	2-189
, bank and stock company charges.....	2-191
, postage and stationery.....	2-190
, subscriptions.....	2-191
, telephone and toll calls.....	2-189
, travelling expenses.....	2-191
Aerial contracting , Accident compensation levies.....	4- 29
, rates.....	2-223
Aerosol spray , cost of.....	2- 32
, wool packs - cost of.....	2- 35
Agents, wetting, spreading and marking.....	2- 84
Aggregation of gifts.....	5- 17
Agricultural salt , cost of.....	2- 17
Agricultural workers (flower gardens) award.....	2-207
Aids, mating management - cost of.....	2- 20
Air freight rates.....	2- 40
Alarm , electric fencing - cost of.....	2-127
, frost - cost of.....	2- 71
Allowable debts, Estate duty.....	5- 5
Almond, trees - cost of.....	2- 57
Anaesthetic, cost of.....	2- 12
Anenomes, bulb cost.....	2- 47
Angora goats , bucks - cost of.....	2- 28
, livestock prices.....	1- 26
, standard values.....	4- 31
Animal Crush , cost of.....	2- 25
Animal Health , cost of.....	2- 3
, equipment - cost of.....	2- 11
Animal Resuscitator, cost of.....	2- 20
Animal Shelters, cost of.....	2- 25
Annuity , present value - life of female.....	5- 25
- life of male.....	5- 21
- widow hood.....	5- 30
Anthelmintics, cost of.....	2- 4
Antibiotics, cost of.....	2- 7

Anti-dust helmet, cost of.....	2- 86
Anti-freeze, cost of.....	2-179
Apiary equipment, cost of.....	2- 52
Apples , bags - cost of.....	2- 72
, levies.....	2- 75
, prices paid to grower.....	1- 37
, trees - cost of.....	2- 57
Applicator, ear tag - cost of.....	2- 23
Apricots , prices paid to growers.....	1- 37
, trees - cost of.....	2- 57
Aprons , dairy shed.....	2- 86
, fencing.....	2-119
, fruit picking.....	2- 71
, hay.....	2- 86
Arizonicas, cost of.....	2-105
Artichoke seed cost.....	2- 45
Artificial Breeding fee (dairy), - cost of.....	2- 27
A.S.A.P. (Actual Sale Average Price), - wool.....	1- 9
Ashburton-Lyndhurst Irrigation scheme charges.....	2- 98
Asparagus , price paid to growers.....	2- 41
, seed cost.....	2- 45
Assessable Income , farmers.....	4- 24
Assessment and collection of , estate duty.....	5- 9
, gift duty.....	5- 18
, taxation.....	4- 7
Aster, seed cost.....	2- 47
Augers, tree planter.....	2-109
Average Market Values of Livestock for 1986 Income	
Year.....	4- 82
Avocardos , price paid to grower.....	1- 37
Awards (wages), details.....	2-207
A.W.A.S.P. (Adjusted Weighted Average Sale Price), wool.	1- 9
Axe, cost of.....	2-175

B

Backfill, shingle - cost of.....	2- 92
Back Support Harness, cost of.....	2- 86
Bagged Lime and Fertiliser, cartage rates.....	2- 38
Bags , picking - cost of.....	2- 72
, poly - cost of.....	2- 73
, ties - cost of.....	2- 73
Bale , accumulator - cost of.....	2-154
, impaler - cost of.....	2-154

Bale hooks (wool), cost of.....	2- 35
Balers , big - cost of.....	2-153
, conventional - cost of.....	2-153
Baling , contracting - rates.....	2-220
, twine, cost of.....	2-154
Ball floats, cost of.....	2-104
Bank, charges.....	2-191
, interest rates.....	2-198
Barbed , staples - cost of.....	2-114
, wire - cost of.....	2-110
Barley , contract harvesting.....	2-220
, dressing and store handling charges.....	2- 50
, drying charges.....	2- 51
, price paid to growers.....	1- 32
, seed cost.....	2- 43
Barn, hay - cost of.....	2-172
, depreciation of.....	4- 36
Battens, tanalised - cost of.....	2-113
Battery, cost of (electric fences).....	2-126
, powered energisers - cost of.....	2-121
Beans, dressing and store handling charges.....	2- 50
, price paid to growers.....	1-32, 1- 41
, seed costs.....	2- 45
Bearing retainer, cost of.....	2- 20
Beef, export schedule.....	1- 13
Bee-keeping, equipment - depreciation allowance.....	5- 38
, expenses.....	2- 52
Bee brushes, cost of.....	2- 56
, taxation of.....	4- 38
Bees, nucleus stock - cost of.....	2- 54
, package, cost of.....	2- 54
, Queens - cost of.....	2- 54
Beetroot, price paid to growers.....	1- 41
Beet, seed cost.....	2- 46
Berryfruit , containers - cost of.....	2- 72
, levies.....	2- 74
, plants - cost of.....	2- 57
Bikes (farm), cost of.....	2-137
Bike trailers cost of.....	2-163
Bird scarer, cost of.....	2- 71
Blackcurrents , levies.....	2- 74
, plants - cost of.....	2- 57
Black passion fruit vines, cost of.....	2- 57
Blanking, Farm Forestry - labour cost.....	2-107

Blending, small seeds - cost of.....	2- 50
Bloat, control - cost of.....	2- 8
, reliever (trochar) - cost of.....	2- 11
Block, pulley - cost of.....	2-173
Bloodstock, taxation of.....	4- 72
Blueberries, levies.....	2- 74
Boars, insurance of.....	2-194
, standard value of.....	4- 31
Booms, spray - cost of.....	2-160
Boots, rubber - cost of.....	2- 88
, safety - cost of.....	2- 88
Borderdyke irrigation, component costs.....	2- 93
Bowling clubs and other Sportsbodies and Greenkeepers Awards.....	2-129
Boxes (seed), cartage rates.....	2- 38
, hire charges.....	2- 48
Boysenberries, levies.....	2- 74
, plants - cost of.....	2- 57
Brambles, plants - cost of.....	2- 57
Brands, cost of.....	2- 23
Brass eartags - cost of.....	2- 23
Breeding Expenses.....	2- 27
Breeding Fees, artificial.....	2- 27
Breeding Stock, prices - cattle.....	1- 15
- sheep.....	1- 6
Bridges, depreciation of.....	4- 36
Broad Beans, seed cost.....	2- 45
Broccoli, price paid to grower.....	1- 34, 1- 42
, seed cost.....	2- 46
Browntop, dressing and store handling charges.....	2- 50
, herbage seed levy.....	2- 47
, price paid to grower.....	1- 35
, seed cost.....	2- 45
Brussel Sprouts, price paid to growers.....	1- 42
Bucket, hard plastic - cost of.....	2- 30
, picking - cost of.....	2- 72
, plastic - cost of.....	2- 21
Bucks, cost of.....	2- 28
Buildings, cost of.....	2-169
, depreciation of.....	4- 36
, insurance of.....	2-192
, repairs and maintenance of.....	2-175
Building Societies, interest rates.....	2-194
Bulbs, air freight rates.....	2- 41

, cost of.....	2- 47
Bulk, lime and fertiliser - cartage rates.....	2- 38
, grain - cartage rates.....	2- 38
Bulls, cost of.....	2- 28
, insurance of.....	2-193
, leads - cost of.....	2- 26
, meat schedule.....	1- 14
, rings - cost of.....	2- 26
Bushburn, seed cost.....	2- 45
Bushcutters, cost of.....	2-157
Butter Beans, seed cost.....	2- 45

C

Cabbage , price paid to grower.....	1- 42
, seed cost.....	2- 46
Cable , electric fencing - cost of.....	2-123
Calcium Borogluconate , cost of.....	2- 11
Calculation of , Estate Duty.....	5- 8
, Fringe Benefits Tax.....	4- 62
, Gift Duty.....	5- 17
, Taxable Income.....	4- 8
Calf , collar - cost of.....	2- 26
, lead - cost of.....	2- 26
, trough - cost of.....	2-103
Calfeteria , cost of.....	2- 21
Calving Requisites , cost of.....	2- 20
Cambridge Roller , cost of.....	2-146
Capsicum , price paid to growers.....	1- 42
Carnations , seed cost.....	2- 47
Car , depreciation of.....	4- 37
, expenses in relation to taxation.....	4- 26
, licensing fee - cost of.....	2-177
, registration - cost of.....	2-176
, repairs and maintenance.....	2-179
, trailer - cost of.....	2-163
Carrots , price paid to grower.....	1- 42
, seed cost.....	2- 46
Cartage Rates.....	2- 36
, distance rates.....	2- 41
, hourly rates.....	2- 41
, time and distance rates.....	2- 42
Cartons , honey - cost of.....	2- 55
, horticulture - cost of.....	2- 72

Cases , horticulture - cost of.....	2- 72
Cash Cropping , expenses.....	2- 48
Cash Flows for Long Term Crops, example.....	3- 17
Cashgora , prices paid for.....	1- 26
Cashmere , prices paid for.....	1- 26
Castration , dog - cost of.....	2- 12
, equipment - cost of.....	2- 21
Casual Wages.....	2-207
Cattle , average market values for 1986 income year....	4- 82
, cartage rates.....	2- 40
, crate - cost of.....	2- 24
, crush - cost of.....	2- 25
, dairy stock prices.....	1- 20
, de-horning bail - cost of.....	2- 24
, depreciation of.....	4- 36
, drenching costs.....	2- 4
, drenching guide.....	2- 4
, Export Meat Schedule.....	1- 13
, feed - cost of.....	2- 13
, gates - cost of.....	2-119
, grazing fees.....	2- 19
, head bail - cost of.....	2- 25
, local cattle prices.....	1- 15
, selling charges.....	2-226
, standard values.....	4- 31
, stops - cost of.....	2-121
, store and breeding stock prices.....	1- 15
, supplements - cost of.....	2- 19
, valuation of.....	4- 70
, weighing platform - cost of.....	2- 24
, yards - cost of.....	2-171
Cauliflower , price paid to growers.....	1- 34, 1- 42
, seed cost.....	2- 46
Celery , price paid to growers.....	1- 42
, seed cost.....	2- 46
Certification of seeds , fees.....	2- 48
Chain , dog - cost of.....	2- 25
Chain link fence , cost of.....	2-116
Chainsaws , cost of.....	2-157
, depreciation of.....	4- 36
Charitable Allowance , Estate duty.....	5- 6
Cherry , cartons - cost of.....	2- 72
, price paid to grower.....	1- 38
, trees - cost of.....	2- 57

Chevon , prices.....	1- 25
Chewings Fescue , Herbage seed levy.....	2- 49
Child Taxpayer , Rebate.....	4- 13
Chisel Plough , cost of.....	2-140
Choppers (mowers) , cost of.....	2-149
Chou Mollier , dressing and store handling charge.....	2- 50
Chrysanthemum , seed cost.....	2- 47
Citrus Fruit , levies.....	2- 75
, trees - cost of.....	2- 57
Clamp Hinges , cost of.....	2-121
Classification of , income for trusts.....	4- 23
, trusts.....	4- 22
Clawback Provisions (Taxation Reform Bill No. 2).....	4- 68
Claws , dairy - cost of.....	2- 30
Clippers , cost of.....	2- 32
Clothing , cost of.....	2- 86
Cloth , shelter and windbreak - cost of.....	2- 58
Clover seed , box hire.....	2- 48
, coating - cost of.....	2- 45
, contract harvesting.....	2-220
, cost of.....	2- 45
, dressing and store handling charges.....	2- 50
, herbage seed levy.....	2- 49
, price paid to grower.....	1- 36
CNG , refund of tax.....	1- 47
Coating of Seed , cost of.....	2- 45
Cocksfoot , dressing and store handling charges.....	2- 50
, herbage seed levy.....	2- 49
, price paid to grower.....	1- 35
, seed cost.....	2- 45
Collar , dog - cost of.....	2- 25
Comb Foundation (honey) , cost of.....	2- 55
Combine Harvester , cost of.....	2-133
, licensing - cost.....	2-177
, registration cost.....	2-176
, running cost.....	2-182
Combs , shearing - cost of.....	2- 32
Commission on Stock Sales.....	2-226
Community Water Supply Charges.....	2-100
Companies , taxation of.....	4- 19
Company Directors' Fees , withholding payments.....	4- 4
Computer , farmer requirements.....	2-164
, guide for purchasing.....	2-164
, hardware prices.....	2-166

	, software prices.....	2-166
Concrete	, culverts - cost of.....	2- 72
	, dams - borderdyke irrigation cost.....	2- 93
	, pipes - cost of.....	2- 92
	, posts - cost of.....	2-113
	, post staples - cost of.....	2-114
	, tanks - cost of.....	2-104
	, troughs - cost of.....	2-103
	, water troughs - cost of.....	2-103
Conditioners	, hay - cost of.....	2-152
	, mower - cost of.....	2-150
Conservation Grant (Soil and Water).....		1- 46
Consolidated Dressing Charges.....		2- 50
Consultancy Charges (Farm Advisory Services).....		2-201
Consultation , Veterinary - cost of.....		2- 12
Consumable Aids , valuation of.....		4- 30
Containers , cool storage rates.....		2- 74
Contracting Charges.....		2-220
Contractors , Accident Compensation Levies on.....		4- 28
Control Units , spray equipment - cost of.....		2-161
Conventional Balers , cost of.....		2-153
Cool Storage Rates.....		2- 74
Cottages , cost of.....		2-169
Counters , tally - cost of.....		2- 34
Country Service Freight Rates.....		2- 37
County , rates.....		2-194
	, stock water races.....	2-100
Courgettes , price paid to growers.....		1- 42
Covered Yards , cost of.....		2-170
Covers , goats - cost of.....		2- 21
	, lambs - cost of.....	2- 21
Cow , cartage rates.....		2- 40
	, dairy - gross margin.....	3- 13
	, mini-milker - cost of.....	2- 29
Cow Pregnancy Testing , cost of.....		2- 12
Cradle , docking - cost of.....		2- 22
Crate (stock) , cost of.....	2- 24,	2-163
	, depreciation of.....	4- 36
Crawlers , cost of.....		2-133
Crayons , ram harness - cost of.....		2- 20
Cress , seed cost.....		2- 46
Crested Dogstail , dressing and store handling charge..	2- 57	
	, herbage seed levy.....	2- 49
	, price.....	1- 35

Crocuses , bulb cost.....	2- 47
Crooks , lambing - cost of.....	2- 20
Crop expenses.....	2- 48
Crop Gross Margin , example (wheat).....	3- 4
Crop , insurance.....	2-193
, long term cash flow.....	3- 17
Crop Prices ,.....	1- 32
, barley.....	1- 32
, beans.....	1- 33
, broccoli.....	1- 34
, cauliflower.....	1- 34
, lupins.....	1- 34
, oats.....	1- 32
, peas.....	1- 33
, potatoes.....	1- 34
, wheat.....	1- 32
Crops , growing - in relating to taxation.....	4- 30
Crossbred Wool Prices , late 1986.....	1- 10
Crowbar , cost of.....	2-119
Crushes , animal - cost of.....	2- 25
Cucumber , price paid to grower.....	1- 42
, seed cost.....	2- 46
Cultivation , contracting rates.....	2-221
Cultivation Equipment , cost of.....	2-139
Cultivators , cost of.....	2-142
, rotary - cost of.....	2-144
Culverts , cost of.....	2- 92
, repairs and maintenance of.....	2-175
Cup Remover , cost of.....	2- 29

D

Daffodils , bulb cost.....	2- 47
Dagging Plant , cost of.....	2- 32
Dams , cost of.....	2- 93
Dahlia , seed costs.....	2- 47
Dairy , bloat control - cost of.....	2- 8
, calfeteria - cost of.....	2- 21
, cattle prices.....	1- 20
, commissions on sale.....	2-226
, cow gross margin.....	3- 13
, detergents - cost of.....	2- 29
, ointments - cost of.....	2- 8

, shed - cost of.....	2-171
, shed equipment.....	2- 29
, shed hygiene - cost of.....	2- 9
, soaps - cost of.....	2- 8
, sprays - cost of.....	2- 8
, standard values.....	4- 31
Dairy Companies , interest rates.....	2-194
Dairy Produce ,.....	1- 18
, whole milk for manufacture.....	1- 18
, whole milk for town supply.....	1- 19
Dairy Product Price Authority.....	1- 18
Dawson International Price for Cashmere.....	1- 27
Deer , average market values for 1986 Income Year.....	4- 83
, commission on sale.....	2-226
, complex - cost of.....	2-172
, feed - cost of.....	2- 15
, fence - cost of.....	2-134
, gates - cost of.....	2-120
, insurance of.....	2-194
, livestock prices.....	1- 29
, netting - cost of.....	2-115
, posts - cost of.....	2-112
, sheds and yards.....	1-171
, standard value.....	4- 31
, valuation of.....	4- 70
, velvet prices.....	1- 28
, venison.....	1- 28
, veterinary charges.....	1- 12
De-horners , cost of.....	2- 24
Dependant Relative , as a tax rebate.....	5- 15
Depreciation.....	4- 26 , 4- 36
, in the fishing industry.....	4- 48
, in horticulture.....	4- 47
, of cars.....	4- 37
, recovery of (taxation).....	4- 74
, schedule of rates.....	4- 47
Detergents, dairy shed - cost of.....	2- 9
Development, expenditure.....	4- 39
, fish farming.....	4- 49
, recovery of taxation.....	4- 41
Diesel , cost of.....	2- 78
Dipping , contract cost.....	2-222
, materials - cost of.....	2- 3
Dips , repairs and maintenance.....	2-175

Direct drilling , contracting.....	2-222
Directors fees , withholding period.....	4- 4
Discs , cost of.....	2-141
, power - cost of.....	2-141
Disease Eradication Levy , cattle.....	1- 14
Disinfectant , cost of.....	2- 8
Dispositions of Matrimonial Property.....	4- 58 , 5- 15
Distance Licences.....	2-179
Docking , cradles - cost of.....	2- 22
, cost.....	2- 21
Dog , castration - cost of.....	2- 12
, chains - cost of.....	2- 25
, collars - cost of.....	2- 25
, feed - cost of.....	2- 15
, kennels - cost of.....	2- 25
, registration - cost of.....	2- 25
, speying - cost of.....	2- 12
, troughs - cost of.....	2-103
, vaccination - cost of.....	2- 12
Dogstail , dressing and store handling charges.....	2- 50
, herbage seed levy.....	2- 49
, price paid for.....	1- 35
, seed coating - cost of.....	2- 45
Donations and School fees , as tax rebates.....	4- 16
Drainage , cost of.....	2- 92
, materials - cost of.....	2- 92
Drafting fee for Freezing Works.....	1- 5
Drenching , cost of.....	2- 4
, guide for cattle.....	2- 4
, guide for sheep.....	2- 4
, guns - cost of.....	2- 11
Dressing Charges , seed.....	2- 50
Dressings , animal health - cost of.....	2- 3
Drilling , well - cost of.....	2-100
Drills , cost of.....	2-147
, precision - cost of.....	2-148
Drivers , posts and standards.....	2-117
Droppers , costs of.....	2-113
Droving work , PAYE withholding payments.....	4- 4
Dryers , grain - cost of.....	2-156
Drying Charges , grain and seed.....	2- 51
Due dates for , annual returns (taxation).....	4- 6
, provisional tax payments.....	4- 75
Dust masks , cost of.....	2- 87

Dutiable gifts.....	5- 14
Dwarf Beans , seed cost.....	2- 45
Dwellings , costs of.....	2-169
, repairs and maintenance of.....	2-175

E

Ear Muffs , cost of.....	2- 87
Earmarkers , cost of.....	2- 21
Eartags , cost of.....	2- 22
Earthing equipment , electric fencing.....	2-122
Earthworks , borderdyke irrigation - cost of.....	2- 93
Eel farming , Accident Compensation levies on.....	4 -27
Egg Plant , seed cost of.....	2- 46
Electric grinders , cost of.....	2- 32
Electricity , cost of.....	2-184
, South Island concession.....	2-188
Electronic sheep counters , cost of.....	2- 34
Elk , standard values.....	4- 31
Emasculators , cost of.....	2- 21
Embedders , cost of.....	2- 56
Emery paper , cost of.....	2- 32
Employers , Accident compensation levy.....	4- 28
Employers liability , insurances.....	2-193
Employment related expenses , exemption from taxation..	4- 12
Endive , seed cost.....	2- 46
Energisers , electric fencing - cost of.....	2-121
Enterprise Analysis.....	3- 3
Estate Duty.....	5- 3
, allowable debts.....	5- 5
, assessment and collection.....	5- 9
, calculation of.....	5- 8
, charitable allowances.....	5- 6
, example of calculations.....	5- 10
, exemptions from.....	5- 5
, matrimonial home allowance.....	5- 6
, property liable to.....	5- 3
, rates of.....	5- 20
, reliefs.....	5- 8
, valuation - of estate.....	5- 6
- succession.....	5- 7
Estate and gift Duties Act.....	5- 3
Eucalyptus trees , cost of.....	2-105
Ewe tethering pegs , cost of.....	2- 20

Excluders , beehives , cost of.....	2- 53
Exempt Income , taxation.....	4- 9
Exemptions from , Estate Duty.....	5- 5
, Gift Duty.....	5- 15
, Taxation.....	4- 9
Expenditure on Land Improvement Development.....	4- 39
, Rates of depreciation.....	4- 78
Export Meat Schedules , beef.....	1- 13
, mutton and lamb.....	1- 3
, pork.....	1- 22
, venison.....	1- 29
Export Incentives.....	4- 51
, in relation to South Africa.....	4- 74
, market - development activities incentive.....	4- 55
- tourist promotion incentive.....	4- 54
, performance incentive for - qualifying goods.....	4- 51
- services and projects.....	4- 53
- tourist services.....	4- 53
Export programme suspensory loan scheme.....	4- 57
Extractors , honey - cost of.....	2- 54
Eye protection , goggles - cost of.....	2- 86

F

Faceshields , welding - cost of.....	2- 87
Factory Supply (milk) , gross margins.....	3- 13
, price paid.....	1- 18
Fallow deer , standard values.....	4- 31
, venison prices.....	1- 29
Family partnerships , taxation of.....	4- 20
Family rebate , taxation.....	4- 14
Farm , bikes - cost of.....	2-137
, buildings - cost of.....	2-169
- repairs and maintenance.....	2-175
, equipment - cost of.....	2-139
- insurance of.....	2-192
, expenses (taxation).....	4- 25
, forestry - labour costs.....	2-105
- taxation of.....	4- 42
, income - assessable for taxation.....	4- 24
- equilisation scheme.....	4- 43, 4- 50
, machinery - costs.....	2-130
, ownership savings rebate (taxation).....	4- 16

, revenue.....	1- 3
, cattle.....	1- 13
, crops.....	1- 32
, dairy.....	1- 18
, deer.....	1- 28
, fruit.....	1- 37
, goat.....	1- 25
, NWSCA grants.....	1- 46
, pig.....	1- 22
, refunds of sales taxes on fuels.....	1- 47
, skins.....	1- 12
, small seeds.....	1- 35
, sheep.....	1- 3
, vegetables.....	1- 41
, wool.....	1- 8
, work - PAYE (withholding payments).....	4- 4
Farmer , requirements - microcomputers.....	2-164
, taxation of.....	4- 24
Farming , Accident Compensation levies.....	4- 28
, depreciation of land improvement.....	4- 78
, investment allowance.....	4- 39
Farms and Stations awards.....	2-207
Fastenings , gates - cost of.....	2-120
Fat stock , cartage rates.....	2- 39
Fawn netting , cost of.....	2-116
Federated Farmers , levies - cattle.....	1- 14
- pigs.....	1- 22
- sheep.....	1- 5
- wheat.....	2- 49
Feed , barley - price.....	1- 32
, cost of.....	2- 13
, cattle.....	2- 13
, deer.....	2- 15
, dog.....	2- 15
, goats.....	2- 15
, horses.....	2- 15
, pigs.....	2- 14
, poultry.....	2- 16
, rabbits.....	2- 15
, sheep.....	2- 13
, equipment - silage , cost of.....	2-155
, mixer - cost of.....	2-156
Feeders (bees) , cost of.....	2- 53
Fees , professional.....	2-200

, seed testing.....	2- 48
Fence , deer - cost of.....	2-128
Fencing , equipment and materials.....	2-110
, guide to cost.....	2-127
Fencing Contractors , Accident Compensation levies.....	4- 27
Fertiliser , agricultural - cost of.....	2- 89
, cartage rate.....	2- 38
, horticultural.....	2- 59
, spreaders - cost of.....	2- 60, 2-148
, spreading - contract.....	2-222
Fescue , dressing and store handling charges.....	2- 50
, herbage seed levy.....	2- 49
, price paid to growers.....	1- 35
Fibreglass standards (electric fencing) , cost of.....	2-124
Field , peas - dressing and store handling charges.....	2- 50
- prices paid for.....	1- 33
- seed cost.....	2- 44
, tiles (drainage) - cost of.....	2- 92
First home mortgage rebate (taxation).....	4- 16
First year depreciation allowances.....	4- 36
Fish , Farming - Accident Compensation levies.....	4- 28
- Depreciation of improvements.....	4- 80
- Development expenditure (taxation)....	4- 49
Fishing , Industry - depreciation allowances.....	4- 48
- taxation of.....	4- 48
, Investment allowance.....	4- 49
, Vessel Ownership Savings rebate (taxation)...	4- 16
Fitch supplement , cost of.....	2- 19
Flax , cost of plants.....	2-105
Flea power , cost of.....	2- 3
Fleece bins , cost of.....	2- 33
Fleece weigher , cost of.....	2- 34
Floats (water) , cost of.....	2-104
Flowers , air freight rates.....	2- 41
, seeds - cost of.....	2- 47
Flystrike dressing , cost of.....	2- 3
Foodstuffs , air rates.....	2- 41
Footrot , aerosol - cost of.....	2- 3
, shears - cost of.....	2- 11
, troughs - cost of.....	2- 11
Footwear , cost of.....	2- 88
Forage , harvester - cost of.....	2-134
Forestry , depreciation of land improvement.....	4- 79
, Service (NZ) Guide to Labour Cost.....	2-106

, taxation of.....	4- 68
, Workers' Award.....	2-109
Forklift , cost of.....	2-162
, horticulture - cost of.....	2- 69
Frames , for bee hives - cost of.....	2- 52
Freesias , bulb cost.....	2- 47
, seed cost.....	2- 47
Freezer peas , price paid for.....	1- 33
Freight Rates.....	2- 36
, air.....	2- 40
, road.....	2- 38
Fringe Benefits , definition of.....	4- 60
Fringe Benefits Tax.....	4- 60
, calculation of.....	4- 62
, valuation of.....	4- 62
Frost Alarm , cost of.....	2- 71
Frozen semen , cost of.....	2- 27
Fruit , plants - cost of.....	2- 57
, prices paid to growers.....	1- 37
, tree prices.....	2- 57
Fuel , consumption of tractors.....	2-179
, cost of.....	2-178
, tax refund on.....	1- 47
Fumigants , soil - cost of.....	2- 60
Fungicides , agricultural - cost of.....	2- 83
, horticultural - cost of.....	2- 63

G

Gambrel , metal - cost of.....	2-174
Garages , cost of.....	2-169
Garden Peas , dressing and store handling charges.....	2- 50
, price paid for.....	1- 33
, seed cost.....	2- 44
Gardeners (and Nurserymen) Award.....	2-216
Garlic , prices paid for.....	1- 43
Gate fittings and fastenings , cost of.....	2-120
Gates , cost of.....	2-119
Generators , portable - cost of.....	2-158
Geranium , seed cost.....	2- 47
Gerbera , seed cost.....	2- 47
Gift duty , aggregation of gifts.....	5- 18
, assessment and collection.....	5- 18
, calculation of.....	5- 17

, definitions.....	5- 14
, example of assessment.....	5- 19
, exemptions from.....	5- 15
, rates of.....	5- 36
, valuation of gift.....	5- 14
Glasshouse tomatoes , gross margin.....	3- 5
Glasshouses , cost of.....	2- 58
, depreciation rates on.....	4- 37, 4- 47
Gloves , beekeeping - cost of.....	2- 55
, cost of.....	2- 86
Glue , horticultural - cost of.....	2- 73
Goat production , cashmere prices.....	1- 27
, chevon production.....	1- 25
, introduction.....	1- 25
, milk.....	1- 25
, mohair.....	1- 26
, stock prices.....	1- 26
Goats , average market value for 1986 income year.....	4- 84
, commission on sale.....	2-226
, feed - cost of.....	2- 15
, harness (mating) - cost of.....	2- 20
, insurance of.....	2-194
, livestock prices.....	1- 26
, meat prices.....	1- 25
, milk prices.....	1- 25
, mini milkers - cost of.....	2- 29
, netting - cost of.....	2-116
, shearing machine conversion plant.....	2- 32
, standard value.....	4- 31
, valuation of.....	4- 70
Goggles , eye protection - cost of.....	2- 86
, welding - cost of.....	2- 86
Goods and Services Tax , overview.....	4- 64
, records.....	4- 67
, registration.....	4- 64
, returns and payment.....	4- 65
, tax invoices.....	4- 66
Goods , general - road cartage rates.....	2- 38
Gooseberry bushes - cost of.....	2- 57
Gorse cutting , contract rates.....	2-224
Grab nook , cost of.....	2-174
Grading , sheep and lamb - export prices.....	1- 3
, Town Milk.....	1- 19
Grain , bulk cartage rates.....	2- 38

, dryers - cost of.....	2-156
, drying charges.....	2- 51
, handling equipment.....	2-156
, silos - cost of.....	2-173
Grapefruit , prices paid to grower.....	1- 38
, trees - cost of.....	2- 57
Grapes , prices paid to growers.....	1- 38
Grass seed , contract harvesting.....	2-220
, dressing and store handling charges.....	2- 50
Grazing fees.....	2- 19
Grease , cost of.....	2-178
, gun - cost of.....	2-175
Greenhouses , cost of.....	2- 58
Greenkeepers Award.....	2-219
Grinders, shearing - cost of.....	2- 32
Gross margins , definition.....	3- 3
, worked examples - dairy cows.....	3- 13
- glasshouse tomatoes..	3- 5
- sheep.....	3- 6
- wheat.....	3- 4
Grower retention levy , wool.....	1- 9
Growing Tunnels , cost of.....	2- 58
Growth regulants , cost of.....	2- 61
Ground spreading of fertiliser.....	2-222
Guaranteed Minimum Family Income Tax Credit.....	4- 15
Guide to fencing costs.....	2-127
Gumboots , cost of.....	2- 88
Gypsophyla , seed cost.....	2- 47

H

Hail Damage Compensation Payments , taxation of.....	4- 46
Half Bred wool prices.....	1- 11
Half rounds (posts) , cost of.....	2-111
Halters , cost of.....	2- 26
Hammers , cost of.....	2-119, 2-175
Handpiece (shearers) , cost of.....	2- 32
Hardware, computer - cost of.....	2-166
Harnesses, crayons - cost of.....	2- 20
, ram - cost of.....	2- 20
Harrows, cost of.....	2-146
, power - cost of.....	2-145
Harvesters, combine - cost of.....	2-133

, forage - cost of.....	2-134
Harvesting, contracting.....	2-220
Hats, bee helmets - cost of.....	2- 56
Hay, aprons - cost of.....	2- 86
, barns - cost of.....	2-172
, conditioners - cost of.....	2-152
, handling equipment - cost of.....	2-154
Headbails, cost of.....	2- 25
Headers, cost of.....	2-133
, running costs.....	2-182
, harvest contraction.....	2-220
Health, animal - cost of.....	2- 3
Heaters/coolers, dairy shed.....	2- 31
Hedge trimmers, cost of.....	2-157
Heifers, export meat schedule.....	1- 13
Helicopters, contract rates.....	2-223
Helmet, anti-dust - cost of.....	2- 87
, bee.....	2- 54
, welding.....	2- 87
Herbage seed levy.....	2- 48
Herbicides, agricultural - cost of.....	2- 76
, horticultural - cost of.....	2- 61
Herd basis scheme for taxation of livestock.....	4- 70
Herd recording services - cost of.....	2- 28
Herd testing charges.....	2- 27
Hinges, cost of.....	2-121
Hives and associated equipment , cost of.....	2- 52
Hoggets, export schedule (meat).....	1- 4
, local meat market prices.....	1- 5
, road cartage rates.....	2- 40
Home Ownership Savings, rebate taxation.....	4- 16
Honoraria, withholding payments.....	4- 4
Honey, cartons - cost of.....	2- 55
, extractors - cost of.....	2- 54
, gates - cost of.....	2- 54
, pumps - cost of.....	2- 54
, refractometers - cost of.....	2- 54
, strainers - cost of.....	2- 54
, tanks - cost of.....	2- 54
Hoof cutters, cost of.....	2- 11
Hooks, wool bale - cost of.....	2- 35
Hop growing, Accident Compensation levies.....	4- 27
Horses, commission on sale.....	2-226
, feed - cost of.....	2- 15

, supplements - cost of.....	2- 18
Horticultural, expenses.....	2- 57
, levies.....	2- 74
, taxation of.....	4- 45
Hose, reels - cost of.....	2-160
Hoses (spraying), cost of.....	2-160
Housekeeper/Child care rebate.....	4- 16
Hyacinth, bulb cost.....	2- 47
Hydatid control fee.....	2- 25
Hydraulic, ladder - cost of.....	2- 70
, pruner - cost of.....	2- 70

I

Identification, stock - cost of.....	2- 22
Implements, repairs and maintenance.....	2-175
, sheds - cost of.....	2-172
Income Equalisation Scheme.....	4-43, 4- 50
Income levelling schemes.....	4- 43
Income returns.....	4- 5
Income Stabilisation Arrangements (wool).....	1- 8
Income taxation.....	4- 3
, Assessable income.....	4- 10
, assessment.....	4- 7
, bloodstock.....	4- 72
, calculating taxable income.....	4- 8
, calculation of.....	4- 8
, deduction for employment related expenses....	4- 12
, disposition of matrimonial property.....	4- 58
, due dates for returns.....	4- 6
, exempt income.....	4- 9
, Farmers.....	4- 24
, Fishing Industry.....	4- 48
, Fringe Benefit Taxes.....	4- 60
, Goods and Services Tax.....	4- 64
, Horticulture.....	4- 45
, Introduction.....	4- 3
, of timber sales and farm forestry.....	4- 42
, PAYE.....	4- 3
, personal rebates.....	4- 16
, provisional taxation.....	4- 5
, provisional tax payment dates.....	4- 75
, last dates for payment.....	4- 75
, rates of income tax for individuals.....	4- 77

, returns of income.....	4- 5
, special exemptions.....	4- 12
, taxation in New Zealand.....	4- 3
, taxation of - companies.....	4- 19
- family partnerships.....	4- 20
- individuals.....	4- 9
- partnerships.....	4- 20
- trusts.....	4- 22
, transition to new regime.....	4- 72
, withholding payments.....	4- 4
, transition to new regime.....	4- 72
, rates for individuals.....	4- 77
Inflations, dairy - cost of.....	2- 32
Insecticides, agricultural - cost of.....	2- 81
, horticultural - cost of.....	2- 65
Insulators, electric fencing - cost of.....	2-122
Insultimber, cost of.....	2-125
Insurance rates.....	2-194
International air freight rates.....	2- 41
Investment Allowance.....	4- 39
Irrigation, borderdyke.....	2- 93
, charges (water).....	2- 97
, electricity costs.....	2-186
, plant - depreciation rates.....	4- 37
, Spray - system costing.....	2- 93
Irrigator models - cost of.....	2- 95

J

Jugs, measuring - cost of.....	2-161
Jute wool packs, cost of.....	2- 35

K

Kale, dressing and store handling charges.....	2- 50
, price paid to growers.....	1- 36
, seed cost.....	2- 44
Kellogg Farm Management Unit.....	2-168
Kennel, dog - cost of.....	2- 25
Kidding requisites, cost of.....	2- 20
Killing shed, cost of.....	2-172
Killing sheet deductions.....	1- 5
Kiwifruit, levies.....	2- 75
, long term cash flow.....	3- 17

, price paid to growers.....	1- 38
, vines - cost of.....	3- 17
Knapsack, sprayers - cost of.....	2-161
Knife, pocket - cost of.....	2- 26
, pruning - cost of.....	2- 71
, skinning - cost of.....	2- 26
, uncapping (honey) - cost of.....	2- 54
Kumara, price paid to growers.....	1- 43

L

Lacing wire, cost of.....	2-110
Ladder (horticultural), cost of.....	2- 71
Lamb, covers - cost of.....	2- 21
, Export meat schedule.....	1- 3
, fat - cartage rates.....	2- 38
, Local meat prices.....	1- 5
, store - cartage rates.....	2- 40
, Store prices.....	1- 5
, teats - cost of.....	2- 21
Lambdry covers, cost of.....	2- 21
Lambing, belt - cost of.....	2- 21
, requisites - cost of.....	2- 20
Land Improvement Agreements.....	1- 46
Land Improvement, expenditure on - taxation.....	4- 68
Land preparation, farm forestry - labour cost.....	2-107
Lands and Survey Department, interest rates.....	2-195
Land Transfer Fees.....	2-206
Lawngrass, Herbage seed levy.....	2- 49
, seed cost.....	2- 45
Leeks, price paid to grower.....	1- 43
, seed cost.....	2- 46
Legal Fees, in relation to taxation.....	2-202
Leggings, cost of.....	2- 86
Lemons, price paid to growers.....	1- 38
, trees - cost of.....	2- 57
Lettuce, price paid to growers.....	1- 38
, seed cost.....	2- 46
Levies, Herbage seed.....	2- 48
, Horticulture.....	2- 74
, mutton and lamb.....	1- 5
, potato.....	2- 50
, Wheat growers.....	2- 49
Liability for income tax, trusts.....	4- 22

, farmers.....	4- 24
Licence, time (vehicles) - cost of.....	2-179
, distance (vehicles) - cost of.....	2-170
Licencing Fees for vehicles.....	2-177
Life Insurance Companies, interest rates.....	2-195
Lime, cost at works.....	2- 91
, bagged - cartage rates.....	2- 38
, bulk - cartage rates.....	2- 38
Limitation of tax losses from farming or landowning....	4- 42
Lincoln College, Farm Advisory Service.....	2-201
, Property Management Service.....	2-201
Linseed, contract harvesting.....	2-220
, dressing and store handling charges.....	2- 50
Livestock, average market values for 1986 income year..	4- 82
, commission on sale.....	2-226
, incentive scheme.....	4- 44
, insurance of.....	2-193
, standard value.....	4- 30
, valuation of.....	4,30,4- 70
Live pig sales, prices.....	1- 23
Lobelia, seed cost.....	2- 47
Local Meat Prices, cattle.....	1- 13
, pigs.....	1- 23
, sheep.....	1- 5
Loss Offset Provisions, Taxation Reform Bill (No 2)....	4- 68
Lotus, Herbage seed levy.....	2- 49
, price paid to growers.....	1- 35
, seed costs.....	2- 45
Louse powder, cost of.....	2- 3
LPG, refund on tax.....	1- 47
Lucerne, dressing and store handling charges.....	2- 50
, Herbage seed levy.....	2- 49
, price paid to growers.....	1- 36
, seed coating - cost of.....	2- 45
, seed cost.....	2- 44
Lupins, contract harvesting.....	2-220
, dressing and store handling charges.....	2- 50
, price paid to growers.....	1- 34
, seed cost.....	2- 43

M

Machinery, farm cost of.....	2-130
, registration - cost of.....	2-176

, meters - cost of.....	2- 31
, filters - cost of.....	2- 31
, prices (milk fat).....	1- 18
, town supply.....	1- 20
Milkstone remover, cost of.....	2- 10
Mineral supplements, cost of.....	2- 17
Minimilker, cost of.....	2- 29
Minimum floor prices, wool.....	1- 8
Ministry of Works and Development, Irrigation Schemes..	2- 97
Miticides, cost of.....	2- 67
Mohair, prices paid.....	1- 26
Mohair Producers Association of N.Z.....	1- 26
Moledrain ploughs, cost of.....	2-139
Molasses, cost of.....	2- 17
Monitors, electric fences - cost of.....	2-127
Morven-Glenavy Irrigation Scheme charges.....	2- 98
Motels, dog - cost of.....	2- 25
, sheep.....	2- 25
Motor, bikes - farm, cost of.....	2-137
- licencing fees.....	2-178
- registration fees.....	2-176
- trailers, cost of.....	2-163
, spirits duty - refund on.....	1- 47
Mower conditioners, cost of.....	2-150
Mowers, cost of.....	2-149
, orchard - cost of.....	2- 69
Muffs, ear - cost of.....	2- 87
Mushrooms, price paid to growers.....	1- 43
Mustard, dressing and store handling charges.....	2- 50
Mutton, export schedule.....	1- 4

N

Nails, horticultural - cost of.....	2- 73
National Water and Soil Conservation Authority grants..	1- 46
Nectarines, price for fruit.....	1- 39
, trees - cost of.....	2- 57
Nil Value Scheme.....	4- 33
Notional estate.....	5- 4
Nozzle and tips for spray equipment, cost of.....	2-161
Nurserymen and Gardeners Award.....	2-216
Nutritional supplements, cost of.....	2- 17
Nutrition, cost of.....	2- 13
Nut trees, cost of.....	2- 57

, rubber bands - cost of.....	2- 73
, scales - cost of.....	2- 73
, stamping.....	2- 74
, tape dispenser.....	2- 73
, trays - cost of.....	2- 72
Packing sheds, cost of.....	2-172
Packs, wool - cost of.....	2- 35
Palpation, rams - cost of.....	2- 12
Pampas grass, cost of plants.....	2-105
Paparua County Council, stock water race charges.....	2-109
Parkas, cost of.....	2- 87
Parsley, price paid to growers.....	1- 43
, seed cost.....	2- 46
Partnerships, taxation of.....	4- 20
, family.....	4- 20
Passionfruit, cost of - seeds.....	2- 52
- vines.....	2- 57
, price paid to growers.....	1- 39
P.A.Y.E. taxation.....	4- 3
Peaches, price paid to growers.....	1- 39
, trees - cost of.....	2- 57
Pear trees, cost of.....	2- 57
Peas, contract harvesting.....	2-220
, dressing and store handling charges.....	2- 50
, drying charges.....	2- 51
, prices paid to growers.....	1-33, 1- 44
, seed box hire.....	2- 48
, seed cost - cereal.....	2- 44
- vegetable.....	2- 46
Peat, cost of.....	2- 70
Penalties, milk.....	1- 19
Pensions, table of valuations.....	5- 21
Pepinos, price paid to growers.....	1- 39
Peppers, price paid to growers.....	1- 42
Personal, accident insurance.....	2-193
, tax rebates.....	4- 13
- dependent relatives.....	4- 15
- donations and school fees.....	4- 16
- family.....	4- 14
- first home mortgage.....	4- 16
- Home, Farm and Fishing Vessels Ownership Savings.....	4- 16
- housekeeper/child.....	4- 16
- principal income earner.....	4- 14

- visitors from overseas.....	4- 17
Pest control.....	2- 81
, insecticides.....	2- 81
, rodent prevention.....	2- 85
Petrol, cost of.....	2-178
, refunds of taxes.....	1- 47
Phlaris, Herbage Seed Levy.....	2- 49
, price paid to growers.....	1- 35
Picks, cost of.....	2-175
Picking equipment, cost of.....	2- 71
, aprons.....	2- 71
, bags and buckets.....	2- 72
, ladders.....	2- 71
, sizing rings.....	2- 72
Piggeries, repairs and maintenance - cost of.....	2-175
Pig , average market values for 1986 Income year.....	4- 86
, commission on sale.....	2-226
, drinking nipples, cost of.....	2- 21
, feed - cost of.....	2- 14
, livestock prices.....	1- 23
, meat prices.....	1- 22
, rings - cost of.....	2- 25
, standard values.....	4- 31
, supplements - cost of.....	2- 18
, trough - cost of.....	2-103
, valuation of.....	4- 70
Pinus radiata trees, cost of.....	2-105
Pipes, water supply, cost of.....	2-102
Pipfruit, levies.....	2- 75
, trees - cost of.....	2- 57
Plant, and machinery - depreciation allowances.....	4- 37
, insurance of.....	2-192
, repairs and maintenance of.....	2-175, 2-179
, shearing shed - cost of.....	2- 32
Planter, bags - cost of.....	2- 69
Plastic labels, cost of.....	2- 70
Platform, weighing - cost of.....	2- 24
Pliers (fencing), cost of.....	2-119
Ploughs, cost of.....	2-139
, chisel - cost of.....	2-140
, mole drain - cost of.....	2-139
Plums, prices paid to growers.....	1- 39
, trees - cost of.....	2- 57
Pneumatic pruners, cost of.....	2- 74

Pocket knives, cost of.....	2- 26
Pollen traps, cost of.....	2- 53
Polybags (horticulture), - cost of.....	2- 73
Polyanthus, seed cost.....	2- 47
Polythene, film cost of.....	2- 70
, piping - cost of.....	2-102
Poplars, cost of trees.....	2-105
Pork Industry Council levies.....	1- 22
Pork Marketing Board Stabilisation levy.....	1- 22
Pork prices.....	1- 22
Portable, generator - cost of.....	2-158
Post, drivers - cost of.....	2-117
, hole diggers - cost of.....	2-118
, removers - cost of.....	2-118
Postage costs.....	2-190
Posts, cost of.....	2-110
Potato Growers Federation, levy.....	2- 50
Potato harvesting, contract rate.....	2-224
Potatoes, levies.....	2- 50
, minimum weight - transport rates.....	2- 45
, prices paid to growers.....	1-34, 1- 44
Poultry, farming - Accident Compensation levies.....	4- 28
, feed - cost of.....	2- 16
Power, discs - cost of.....	2-141
, harrows - cost of.....	2-145
Prairie grass, herbage seed levy.....	2- 47
, price paid to growers.....	1- 35
, seed cost.....	2- 45
, store handling charges.....	2- 50
Precision drill, cost of.....	2-148
Pregnancy testing (cows), cost of.....	2- 12
Presses, wool - cost of.....	2- 37
Pressure, gauges (spray equipment) - cost of.....	2-161
, pipes (PVC) - cost of.....	2-102
Principal Income Earner, Tax Rebate.....	4- 14
, Transitional Allowance.....	4- 15
Process potato price.....	1- 14
Processing charges, sheep meat.....	1- 5
Productivity Improvers, cost of.....	2- 20
Professional Fees.....	2-200
Propagating materials (horticulture), cost of.....	2- 69
Protective equipment.....	2- 86
Protection grants, soil and water.....	1- 46
Provisional, taxation system.....	4- 5

, tax payers - last date for payments.....	4- 75
Pruners, horticulture - cost of.....	2- 74
Pruning, farm forestry.....	2-108
Pruning equipment, hydraulic pruners.....	2- 70
, knives.....	2- 71
, saws.....	2- 71
, secateurs.....	2- 70
Public Liability, insurance.....	2-193
Pulley blocks, cost of.....	2-173
Pulsator (dairy shed), cost of.....	2- 30
Pumping units, spray irrigation - cost of.....	2- 94
Pumpkins, price paid to growers.....	1- 44
, seed cost.....	2- 46
Pumps, cost of.....	2-101
, spray - cost of.....	2-159
Punnets, cost of.....	2- 73

Q

Quarterbred wool, price paid for.....	1- 11
Quarter milker, cost of.....	2- 29
Quartertips, cost of.....	2- 21
Queen bees, cost of.....	2- 54
Queen rearing materials (bees), cost of.....	2- 56
Quota milk, price.....	1- 19

R

Rabbits, feed - cost of.....	2- 15
Races, water-charges.....	2-100
Raddle, cost of.....	2- 22
Radish, price paid to growers.....	1- 44
, seed cost.....	2- 46
Railways, transport - main centres.....	2- 36
- country.....	2- 37
Ram , bleeding - cost of.....	2- 12
, cost.....	2- 28
, harness - cost of.....	2- 20
, insurance of.....	2-193
, meat export schedule.....	1- 4
, palpation - cost of.....	2- 12
Rammer (fencing), cost of.....	2-119
Rape, seed cost.....	2- 44
, store handling charges.....	2- 50

Raspberries, levies.....	2- 74
, plants - cost of.....	2- 57
, price paid to growers.....	1- 40
Rates.....	2-194
Rates of, estate duty.....	5- 20
, gift duty.....	5- 36
, income taxation.....	4- 77
Rat , poison - cost of.....	2- 85
, traps - cost of.....	2- 85
Real Estate charges.....	2-203
Rebates, taxation.....	4- 13
Recovery of development expenditure and interest.....	4- 41
Red Clover, dressing charges and store handling charges	2- 50
, herbage seed levy.....	2- 49
, price paid to grower.....	1- 36
, seed coating.....	2- 45
, seed cost.....	2- 45
Redcurrants, plants cost of.....	2- 53
Red deer, standard values.....	4- 31
, venison price.....	1- 28
Reels, electric - cost of.....	2-125
, wire - cost of.....	2-118
Refunds of taxes and fuels.....	1- 47
Registration, dogs - cost of.....	2- 25
, plates - cost of.....	2-176
, vehicles - cost of.....	2-176
Regulants, growth - cost of.....	2- 61
Relief from, estate duty.....	5- 8
, gift duty.....	5- 9
Remote control for pumps.....	2- 97
Rent.....	2-199
Repairs and maintenance, buildings.....	2-175
, in relation to taxation.....	4- 26
, machinery.....	2-179
Respirators, cost of.....	2- 86
Return of income taxation.....	4- 5
Revenue, cattle.....	1- 13
, crops.....	1- 32
, dairy.....	1- 18
, deer.....	1- 28
, fruit.....	1- 37
, goat.....	1- 25
, National Water and Soi Conservation Authority Grants.....	1- 46

, pig.....	1- 22
, refund of taxes on fuels.....	1- 47
, sheep.....	1- 3
, skins.....	1- 12
, small seeds.....	1- 35
, vegetable.....	1- 41
, wool.....	1- 8
Rhubarb, price paid to growers.....	1- 44
, seed cost.....	2- 46
Roads, repair and maintenance.....	2-175
Road Transport Rates.....	2- 38
Road User Charges, cost of.....	2-177
Rockmelon, price paid to growers.....	1- 40
, seed cost.....	2- 46
Rodent prevention, cost of.....	2- 85
Rollers, cost of.....	2-146
Rotary, cultivators - cost of.....	2-144
, slashers - cost of.....	2-151
Round balers, cost of.....	2-153
Rubber, bands - cost of.....	2- 73
, boots - cost of.....	2- 88
, rings - cost of.....	2- 51
Runner beans, seed cost.....	2- 45
Running costs, combine harvester.....	2-182
, irrigation (spray).....	2- 94
, tractor.....	2-179
Rural Banking and Finance Corporation policies and interest rates.....	2-195
Ryecorn, seed cost.....	2- 43
, dressing and store handling charges.....	2- 50
Ryegrass, contract harvesting.....	2-220
, dressing and store handling charges.....	2- 50
, price paid to growers.....	1- 35
, seed box hire.....	2- 48
, seed coating, cost of.....	2- 45
, seed cost.....	2- 44
, seed levy.....	2- 49

S

Sacks, cost of.....	2- 48
, sizes.....	2- 48
Safety, boots - cost of.....	2- 88
, equipment - cost of.....	2- 87

Salary, PAYE tax on.....	4- 3
Sales tax refund on CNG and LPG.....	1- 47
Salt (agricultural), cost of.....	2- 17
Salt blocks, cost of.....	2- 17
Sand, cost of.....	2-176
Sanitizers (dairy), cost of.....	2- 9
Saw (pruning), cost of.....	2-71, 2-159
Scales, animal - cost of.....	2- 24
, horticultural - cost of.....	2- 77
Scarer, bird - cost of.....	2- 71
Schedules, Export Meat - Beef Cattle.....	1- 13
- Pork.....	1- 22
- Mutton/lamb.....	1- 3
- Venison.....	1- 29
School Fees, Tax Rebates.....	4- 16
Seasonal supply (milk), gross margin.....	3- 13
Secateurs, cost of.....	2- 70
Seed, blending - cost of.....	2- 50
, boxes - hiring, cost of.....	2- 48
- road cartage rates.....	2- 38
- (drills) cost of.....	2-147
, Certification Fees.....	2- 48
, coating - cost of.....	2- 45
, drying charges.....	2- 51
, levies (herbage).....	2- 48
, testing fees.....	2- 48
Seeds, cost of - barley.....	2- 43
- flowers.....	2- 47
- lupins.....	2- 43
- maize.....	2- 44
- oats.....	2- 43
- peas.....	2- 44
- ryecorn.....	2- 43
- small.....	2- 44
- vegetable.....	2- 45
- wheat.....	2- 43
Seedy pelts, deductions.....	1- 12
Self Employed, Accident Compensaton levies.....	2- 29
Selling Charges (stock).....	2-225
Semen, frozen - cost of.....	2- 27
Separating charges, seed.....	2- 50
Separator (honey), cost of.....	2- 55
Septic tanks, cost of.....	2- 92
Shade cloth, cost of.....	2- 58

Shearer's, Accident Compensation levies.....	4- 28
Shearing, contract rates.....	2-222
, machines - cost of.....	2- 32
, shed equipment - cost of.....	2- 32
- fleece weighers, cost of....	2- 34
- gear and accessories.....	2- 32
- plant.....	2- 32
- wool pack holders.....	2- 33
- wool presses.....	2- 33
- wool tables.....	2- 33
, shed expenses.....	2- 34
, work - PAYE (withholding payments).....	4- 4
Shears, foot rot - cost of.....	2- 11
Sheds, dairy - cost of.....	2-171
, hay - cost of.....	2-172
, implement - cost of.....	2-172
, killing - cost of.....	2-172
, packing - cost of.....	2-172
, wool - cost of.....	2-170
Sheep, average market value for 1986 income year.....	4- 82
, cartage rates - road.....	2-403
, commission on sale.....	2-220
, counters - cost of.....	2- 34
, crates, depreciation of.....	4- 36
, dipping costs.....	2- 3
, drenching costs - guide to.....	2- 4
, fat - cartage rates.....	2- 39
, feed - cost of.....	2- 13
, gates - cost of.....	2-119
, grazing fees - cost of.....	2- 19
, Gross margins.....	3- 6
, loading ramps - cost of.....	2-171
, motels - cost of.....	2- 26
, Plan.....	2- 28
, revenue - export meat schedule.....	1- 3
- local meat prices.....	1- 5
- store and breeding stock prices.....	1- 6
- wool.....	1- 8
, selling charges.....	2-232
, skins - price paid for.....	1- 12
, standard values.....	4- 31
, store - cartage rates.....	2- 43
, valuation of.....	4- 70
, weigher - cost of.....	2- 25

, yards - cost of.....	2-170
Shelter, and farm machinery - labour costs.....	2-105
, belts - insurance of.....	2-193
, cloth - cost of.....	2- 58
, plants - cost of.....	2-105
Shelters, animal - cost of.....	2- 25
Shepherds, knives - cost of.....	2- 25
, whistle - cost of.....	2- 26
Shield, welding - cost of.....	2- 87
Shingle, backfill - cost of.....	2- 92
Shovels, cost of.....	2-175
Shredders, cost of.....	2-149
Silage, contract rates.....	2-220
, handling equipment - cost of.....	2-155
, pits - cost of.....	2-173
, trailers - cost of.....	2-155
Sills, borderdyke irrigation - cost of.....	2- 93
Silos, grain - cost of.....	2-173
Silverbeet, price paid to growers.....	1- 44
, seed cost.....	2- 46
Sire replacement cost.....	2- 28
Sizing rings, horticulture - cost of.....	2- 72
Skin payments, sheep.....	1- 12
Slashers, cost of.....	2-151, 2-175
Sleepouts, cost of.....	2-170
Sliphook, cost of.....	2-174
Slurry treating, seeds.....	2- 50
Small Seeds , cost of.....	2- 44
, dressing and store handling charges.....	2- 50
, herbage levy.....	2- 49
, prices paid for.....	1- 35
, testing fees.....	2- 48
Smokers (bees), cost of.....	2- 56
Snig chain, cost of.....	2-174
Soaps (dairy), cost of.....	2- 8
Socks, thermal - cost of.....	2- 86
Software, microcomputer - cost of.....	2-166
Soil, and Water Conservation Grants.....	1- 46
, fumigants - cost of.....	2- 60
Solar powered energisers, cost of.....	2-122
Solicitors, interest rates.....	2-197
Solids non fat (milk), prices paid for.....	1- 18
Somatic cell counting, charges.....	2- 28
South Island concession for electricity charges.....	2-188

Sows, standard value.....	4- 31
Spectacles, protective - cost of.....	2- 86
Spinach, price paid to growers.....	1- 45
, seed cost.....	2- 46
Sports bodies, workers award.....	2-224
Spray, booms, cost of.....	2-160
, equipment - (agriculture), cost of.....	2-159
- (horticulture), cost of.....	2- 67
, guns - cost of.....	2-161
, pumps - cost of.....	2-159
, tanks - cost of.....	2-159
Spray contractors, Accident Compensation levies.....	4- 29
Spray irrigation, cost per ha.....	2- 93
, irrigators - cost of.....	2- 95
, mainlines.....	2- 95
, pumping units.....	2- 94
, running costs.....	2- 94
, system costing.....	2- 93
Sprayers, cost of.....	2-159
Sprays, aerosol - cost of.....	2-22, 2- 35
, animal health - cost of.....	2- 3
, dairy - cost of.....	2- 8
Spreaders, fertiliser.....	2-60, 2-148
Spreading agents (sprays), cost of.....	2- 84
Spreading rates, fertiliser and lime.....	2-222
Spring onions, price paid to growers.....	1- 45
Sprinkler Irrigation, equipment costs.....	2- 96
Sprinklers, cost of.....	2- 96
Square balers, cost of.....	2-153
Squash, seed cost.....	2- 47
Stags, cost of.....	2-128
Stamp Duty.....	2-202
Stamping equipment (horticulture), cost.....	2- 73
Standard, drivers - cost of.....	2-117
, removers - cost of.....	2-118
Standard Values of livestock.....	4- 30
Standards, electric fencing - cost of.....	2-124
Standing charges.....	2-192
Staples (fencing), cost of.....	2-113
Stationery costs.....	2-190
Stay blocks (fencing), cost of.....	2-113
Stays (fencing), cost of.....	2-112
Steel, knife sharpening - cost of.....	2- 26
Stencils, cost of.....	2- 34

Stock and Station Agents, interest rates.....	2-197
Stock, buying - Accident Compensation levies.....	4- 29
, commission on sale of.....	2-226
, identification - branding.....	2- 23
- cost of.....	2- 22
- ear tags.....	2- 22
- tattoos.....	2- 23
, insurance.....	2-193
, loans - R.B.F.C.....	2-196
, management - animal crushes.....	2- 25
- cost of.....	2- 20
- dehorning.....	2- 24
- lambing, calving and kidding requisites.....	2- 20
- mating management aids, cost of....	2- 20
- productivity improvers, cost of....	2- 20
- raddles and markers.....	2- 22
- scales.....	2- 24
- tailing, and marking requisites....	2- 21
, price - cattle.....	1- 15
- deer.....	1- 29
- goats.....	1- 26
- sheep.....	1- 5
, water supply charges.....	2-100
, yard posts - cost of.....	2-111
Stock Company charges.....	2-191
Stonefruit, levies.....	2- 75
Storage, cool - rates.....	2- 74
Store, stock - cartage rates.....	2- 40
, stock prices - cattle.....	1- 15
- sheep.....	1- 6
Store dressing and handling charges.....	2- 50
Strainers, fencing - concrete, cost of.....	2-113
- tanalised, cost of.....	2-110
Straining Equipment (fencing), cost of.....	2-116
Strawberries, containers - cost of.....	2- 72
, prices paid to growers.....	1- 40
, runner - cost of.....	2- 57
Structural aids, building - cost of.....	2-173
Structures, borderdyke irrigation - cost of.....	2- 93
Stud stock, commission on sales.....	2- 26
, insurance of.....	2-193
Subscriptions, cost of.....	2-191
Subsoiler, cost of.....	2-140

Subtropical fruit, levies.....	2- 75
, prices paid to growers.....	1- 37
, plants - cost of.....	2- 57
Successions, valuation of.....	5- 7
Sundry income.....	1- 46
Superphosphate, cost of.....	2- 89
Supplements, feed - cost of.....	2- 17
, fitch - cost of.....	2- 19
, horse - cost of.....	2- 18
, mineral and vitamins - cost of.....	2- 17
, nutritional - cost of.....	2- 17
, pig - cost of.....	2- 18
Surgical fee, veterinary.....	2- 12
Surplus milk, price paid for.....	1- 20
Swedes, seed cost.....	2- 44
, seed cost (vegetable).....	2- 47
Sweetcorn, seed cost.....	2- 47
Sweet pea, seed cost.....	2- 47

T

Tables, wool - cost of.....	2- 33
Tags, applicator - cost of.....	2- 23
, cost of.....	2- 22
Tailing requisites, cost of.....	2- 21
Tall Fescue, herbage seed levy.....	2- 49
Tally counters, cost of.....	2- 21
Tamarillo, price paid to growers.....	1- 40
, vines - cost of.....	2- 57
Tangelo, price paid to growers.....	1- 40
, trees - cost of.....	2- 57
Tanks, (water) - cost of.....	2-104
, spraying - cost of.....	2-159
Tape, dispenser - cost of.....	2- 73
Tattoo equipment, ink.....	2- 22
, marking - cost of.....	2- 22
Taxation in New Zealand, overview.....	4- 3
, provisionl tax system.....	4- 5
Tax invoices, GST.....	4- 66
Tax losses from farming or landowning, limitation of...	4- 68
Taxation of income - See Income Taxation	
Taxation, Rebates.....	4- 13
, Reform Bill (No 2).....	4- 68
, Refund on fuels.....	1- 47

Trading stock, basis for taxation.....	4- 71
, valuation of.....	4- 29
Trailer, bike.....	2-163
, car - cost of.....	2-163
, hydraulic.....	2-162
, licence fee.....	2-177
, registration fee.....	2-176
Tranmission, oil - cost of.....	2-178
Transition to New Taxation regime.....	4- 72
Transplanters, cost of.....	2-148
Transport rates, air.....	2- 40
, railways.....	2- 36
, road.....	2- 38
Travelling expenses.....	2-191
Travelling irrigators, cost of.....	2- 95
Trays, tractor - cost of.....	2-162
Tree lucerne, cost of plants.....	2-105
Tree planting expenditure, taxation provisions.....	4- 68
Tree planter and auger.....	2-109
Tree topping, contracting.....	2-224
Trigger price, wool.....	1- 9
Trochar (bloat reliever), cost of.....	2- 11
Troughs, concrete - cost of.....	2-103
Trucks, farm - cost of.....	2-136
, licensing - cost of.....	2-176
, registration - cost of.....	2-173
, repairs and maintenance costs.....	2-179
Trustee savings bank, interest rates.....	2-199
Trust Companies, interest rates.....	2-197
Trusts, classification of.....	4- 22
, liability for income tax.....	4- 22
, taxation of.....	4- 22
Tulip, bulb cost.....	2- 47
Turkey feed, cost of.....	2- 16
Trunip, dressing and store handling charges.....	2- 50
, prices paid to growers (seed).....	1- 36
, seed cost (crop).....	2- 44
, seed cost (vegetable).....	2- 47
Twine, baling - cost of.....	2-154
Two tooth, store and breeding stock prices.....	1- 6

U

Uncapping knives, honey - cost of.....	2- 54
--	-------

T.B. testing, deer - cost of.....	2- 12
Teat, cup remover - cost of.....	2- 29
, lambs - cost of.....	2- 21
, sprays - cost of.....	2- 8
, sprayers - cost of.....	2- 29
Telephone charges.....	2-189
Tension indicator (fencing), cost of.....	2-125
Testers, electric fences - cost of.....	2-126
Testings, herd charge.....	2- 27
, seed fees.....	2- 48
Thinning, farm forestry - labour costs.....	2-108
Ties, bags (horticulture) - cost of.....	2-179
Tiles, field - cost of.....	2- 92
Timber tanks, cost of.....	2-104
Timbersales, taxation of.....	4- 42
Time licence, vehicle - cost of.....	2-179
Timothy, dressing and store handling charges.....	2- 50
, herbage seed levy.....	2- 49
, price paid to growers.....	1- 35
, seed coating, cost of.....	2- 45
Tobacco growing, Accident Compensation levies.....	4- 29
Toll charges.....	2-189
Tomato, boxes - cost of.....	2- 72
, gross margin.....	3- 5
, levies.....	2- 75
, price paid to growers.....	1- 45
, seed cost.....	2- 47
Tools, fencing.....	2-119
, repairs and maintenance.....	2-175
Topdressers, cost of.....	2-148
Toppers, cost of.....	2-151
Town Supply Milk, price paid for.....	1- 19
Trace elements, cost of.....	2- 17
Tractors, agriculture - cost of.....	2-130
, fuel consumption.....	2-179
, hire rates.....	2-221
, horticultural - cost of.....	2- 68
, licensing fee - cost of.....	2-177
, registration - cost of.....	2-176
, repairs and maintenance.....	2-179
, running costs.....	2-179
, tyres - insurance of.....	2-192
Trucks, repairs and maintenance.....	2-175
Trading banks, interest rates.....	2-198

V

Vaccines, cost of.....	2- 6
Vaccination, dog - cost of.....	2- 12
Vaccinators, cost of.....	2- 11
Vacuum pump, dairy shed - cost of.....	2- 29
Valetta Irrigation Scheme charges.....	2- 98
Valuation charges.....	2-206
Valuation of, annuities.....	5- 7
, consumable aids.....	4- 30
, estates for estate duties.....	5- 6
, fringe benefits.....	4- 62
, gifts.....	5- 14
, growing crops - fruit and vegetables.....	5- 30
, livestock.....	4-30, 4- 70
, pensions.....	5- 21
, successions.....	5- 7
, trading stock.....	4- 29
Valves, cost of.....	2-104
Vealers, cartage rate.....	2- 40
Vegetable, levies.....	2- 75
, prices.....	1- 41
, seed costs.....	2- 45
Vehicle, expenses.....	2-176
, registration - cost of.....	2-176
, licencing - cost of.....	2-177
Veils, (beekeeping) - cost of.....	2- 54
Velvet prices.....	1- 28
Velveting, veterinary charges.....	2- 12
Venison prices.....	1- 28
Veterinary charges.....	2- 12
Veterinary club, membership cost.....	2- 12
Vine pruners.....	2- 70
Vineyard (and orchard) Workers Award.....	2-215
Visitors from overseas, taxation.....	4- 17
Vitamin supplements, cost of.....	2- 17

W

Wages, Bowling clubs and sports bodies.....	2-219
, Farm and Station.....	2-207
, Market Garden Workers.....	2-213
, Nurserymen and Gardeners.....	2-216
, of management.....	2-219

, Orchard and Vineyard Workers.....	2-215
, paid to wife - in relation to taxation.....	4- 27
, Shearers and Shedhands.....	2-211
Wages, PAYE tax.....	4- 3
Wallflower, seed cost.....	2- 47
Walnut tree, cost of.....	2- 57
Wapiti, standard values.....	4- 31
, venison prices.....	1- 28
Wasp killer, cost of.....	2- 56
Water and soil conservation grants.....	1- 46
Water, community supply.....	2-100
, pumps.....	2-113
, supply costs.....	2-100
, supply repairs and maintenance.....	2-175
, tanks.....	2-104
, troughs (concrete) - cost of.....	2-103
Water, Rights.....	2- 98
, Stock, supply charge.....	2-100
, Wells, cost of drilling.....	2-100
Water Melon, price paid to grower.....	1- 40
, seed cost.....	2- 47
Wattles, cost of tress.....	2-105
Weaners, cartage rate.....	2- 43
Weed control.....	2- 76
, herbicides - agricultural.....	2- 76
- horticultural.....	2- 61
Weighers, fleece - cost of.....	2- 34
Weighing charges, grain.....	2- 51
Weighing platforms, cost of.....	2- 24
Weirs, borderdyke irrigation - cost of.....	2- 93
Welder, portable - cost of.....	2-158
Welding, protective equipment.....	2- 87
Well, drilling - cost of.....	2-100
, liners - cost of.....	2-103
Wetting agents, sprays.....	2- 84
Wet weather, clothing - cost of.....	2- 87
, gear allowances.....	2-210
Wheat, contract harvesting.....	2-220
, dressing and store handling charges.....	2- 50
, drying charges.....	2- 51
, gross margin.....	3- 4
, levies.....	2- 49
, price.....	1- 32
, seed cost.....	2- 43

Whistle, shepherds - cost of.....	2- 26
White clover, dressing and store handling charges.....	2- 50
, herbage seed levy.....	2- 49
, price paid to growers.....	1- 36
, seed cost.....	2- 45
Whole milk for, manufacture - price paid for.....	1- 18
, town supply - price paid for.....	1- 19
Willows, cost of shelter.....	2-105
Windbreak, cloth - cost of.....	2- 58
, grants (NWASCA).....	1- 46
Windmills, cost of.....	2-162
Windrowers, cost of.....	2-149
Windrowing, contracting.....	2-220
Wire, cost of.....	2-110
, electric - cost of.....	2-123
, netting - cost of.....	2-114
, reels - cost of.....	2-118
, straining equipment - cost of.....	2-116
Withholding payments, tax.....	4- 4
Wooden posts, cost of.....	2-110
Wool, bale hooks - cost of.....	2- 35
, trolleys - cost of.....	2- 34
, cartage rates.....	2- 38
, income retention account.....	1- 9
, income stabilisation arrangement.....	1- 8
, insurance of.....	2-193
, minimum floor price.....	1- 8
, pack holders.....	2- 33
, packs - cost of.....	2- 35
, press - cost of.....	2- 33
, prices in late 1986 - N.I.....	1- 10
- S.I.....	1- 11
, skin payments.....	1- 12
Woolshed expenses, cost of.....	2- 34
Woolsheds, cost of.....	2- 34
Wool table, cost of.....	2- 33

Y

Yams, price paid to growers.....	1- 45
Yard fees.....	2-225
Yards, cattle - cost of.....	2-171
, covered - cost of.....	2-170
, deer - cost of.....	2-171

, repairs and maintenance.....	2-175
, sheep - cost of.....	2-171
Yarrow, herbage seed levy.....	2- 49
, price paid to growers.....	1- 35
, store handling charges.....	2- 50
Yorkshire fog, herbage seed levy.....	2- 49
, price paid to growers.....	1- 35
, seed cost.....	2- 45

Z

Zinnia, seed cost.....	2- 47
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